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UNITED STATES PUBLIC HEALTH SERVICE

HYGIENIC LABORATORY—BULLETIN No. 105
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Biological
& Medical
Serials

DIGEST OF COMMENTS
ON THE
PHARMACOPŒIA OF THE UNITED STATES OF AMERICA
AND ON THE
NATIONAL FORMULARY

FOR THE CALENDAR YEAR ENDING DECEMBER 31
1914

BY
MARTIN I. WILBERT

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PREFACE.

This bulletin, the tenth of the present series of the Digest of Comments, represents a comprehensive index of the available literature relating to the nature, object, or content of the Pharmacopœia of the United States of America and of the National Formulary, the two books recognized by statute as authoritative standards of the purity and strength of drugs and their preparations.

In this, as in the previous numbers of the Digest of Comments, an effort has been made to give, in as concise a form as practicable, working references to all of the published articles relating in any way to the official standards mentioned above. The available pharmaceutical, medical, and chemical periodicals and reports have been carefully reviewed, and every reference that might prove to be helpful, or even suggestive, has been recorded.

An effort has also been made to reflect in as brief a form as practicable the essential features embodied in the several installments of the Abstract of Proposed Changes, with New Standards and Descriptions, published during the year, with a summary of the comments thereon that have appeared in the pharmaceutical journals. These Abstracts of Proposed Changes, in addition to being printed in the Journal of the American Pharmaceutical Association, were also distributed as separate reprints, and the material contained in the five installments that are reviewed has attracted considerable attention and has been liberally commented upon by pharmacists and others interested in the promulgation of equitable standards for widely used drugs and preparations.

From a pharmaceutical point of view the publication of the fifth edition of the British Pharmacopœia is the event of greatest importance to be recorded for the year 1914.

A point of special interest in connection with the appearance of this book is that it completes the adherence of the several powers signatory to the international treaty of 1906 for the unification of the pharmacopœial formulas for potent medicaments. This Pharmacopœia is also interesting in that the committee having the revision of the book in charge has endeavored to produce a British Pharmacopœia suitable for the whole Empire.

The revised Pharmacopœia was formally adopted by the executive committee of the General Medical Council on July 13, 1914, but final publication was somewhat delayed because of the European war, and the book was not placed on exhibition in London until October 1, 1914, when it was advertised to become official on December 31 of the same year.

The medical as well as the pharmaceutical journals of Great Britain, of the several colonies overseas, and of even this country, devoted considerable space to reviews of the book and to discussions of the novel features of this, the fifth edition of the British Pharmacopœia, so that physicians and pharmacists generally were well informed in regard to all of the important changes some weeks before the book was available for general sale.

The second supplement to the fourth edition of the Netherlands Pharmacopœia was published early in 1914, and, like the Pharmacopœia itself, is available both in Latin and in Dutch. In addition to the descriptions for 12 new articles, the pamphlet includes changes in connection with 23 articles already official.

In addition to the publications referred to above, the prospective revisions of the Austrian, the German, and the Italian Pharmacopœias have been productive of many interesting and timely communications that have made restricting the size of this bulletin exceedingly difficult.

As in the preceding numbers of the Digest of Comments, comprehensive discussions or reports are given comparatively little space, the intent being to call attention to the character and scope of the original paper rather than to record its actual content.

In citing references the more available publication is usually given the preference, even in cases where the original article did not appear in the journal first quoted.

For obvious reasons no effort has been made to record all of the journals in which any given paper may have appeared. As an illustration, it may be stated that the papers presented at the annual meetings of the British Pharmaceutical Conference are usually reprinted in all of the British drug journals in addition to the yearbook of the conference itself. To avoid an unnecessarily large number of references, the Pharmaceutical Journal and the yearbook alone are enumerated in this compilation, it being understood that wherever these two references appear conjointly the same article can also be found in the Chemist and Druggist and in the British and Colonial Druggist.

In connection with some few of the more frequently commented-on subjects an effort has been made to reflect the general trend of the comments rather than to record in a comprehensive way all that has been printed during the year. To avoid the repetition of references to subjects more or less related, an attempt has been made in many instances to combine two or more under one heading.

Comments on the action and uses of drugs are confined to reports of pharmacological investigations and to records of unusual, toxic, or secondary effects of official drugs and preparations.

Further to restrict the size of this bulletin, references to specific sera and vaccines other than those already included in or proposed for inclusion in the Pharmacopœia of the United States have been discontinued because of the practical difficulties encountered in reflecting in a condensed and yet comprehensive way the literature relating to all of the many products that are available or under active discussion.

The political disturbance in European countries has entailed unprecedented conditions in the various activities relating to pharmacopœial revision work. Normal conditions in the medicine-supply business have been seriously interfered with, and the drug and chemical markets of the world will undoubtedly feel the disturbing influence of the present conflict for many years to come. The real seriousness of the problems involved will be felt later even more than now because of the interruption of systematic laboratory work in practically all of the countries of Europe. This effect on future progress is already made evident by the suspension and even the discontinuance of publications of a scientific nature in the several countries involved in the war.

From a medical and pharmaceutical point of view the war may offer some degree of recompense in that it will tend to develop our knowledge of the uses of drugs in the prevention of infections and in the checking of certain diseases.

The public health feature of pharmacopœial work is being more and more emphasized, and in practically all parts of the world greater attention is now devoted to the study of prophylactic measures and the materials that are or may be used in connection therewith.

The possible misuse of drugs in various forms is beginning to attract the attention that is rightfully due it as a causative factor in the comparatively rapid increase of degenerative diseases. In our own country discussions along this line have been largely restricted to the promulgation of measures designed to restrict or to safeguard the sale and use of habit-forming drugs. These discussions have been of assistance in securing the enactment of the Federal antinarcotic law, signed by the President of the United States December 17, 1914. This law is designed to restrict, if not to regulate, the sale and distribution of opium and coca, their alkaloids, salts, and derivatives, and will no doubt go far toward making existing or prospective State and local legislation efficient and enforceable.

In Great Britain a select committee of Parliament in a comprehensive report, prepared after conducting an exhaustive investigation of the several problems involved, expressed the opinion that the indiscriminate sale of potent drugs in the form of patent or proprietary remedies constitutes a grave and widespread public evil. Many of these remedies are put on the market by ignorant persons or by cunning swindlers who "exploit for their own profit the apparently invincible credulity of the public."

For the purpose of directing attention to some of the existing abuses in connection with the distribution, sale, and use of medicines, an attempt has been made to record the activities of Federal and State laboratories in connection with the enforcement of food and drug laws and also to review at some length the reports from other chemical laboratories in which pharmaceutical investigations were made. This material has been classified and is reported under the several pharmacopœial titles so as to give at a glance a summary of the work actually done or reported during the calendar year.

The general appreciation of the fact that ready-made prescriptions in the form of fixed formula preparations, either official or proprietary, have a tendency to restrict rather than to further the development of scientific medicine is evidenced by the recognition that has been accorded to the list of useful drugs published by the council on pharmacy and chemistry of the American Medical Association.

The ninth revision of the Pharmacopœia of the United States of America and the revised edition of the National Formulary are now in press and will no doubt be ready for distribution before the end of the present calendar year.

In conclusion the compiler desires to extend thanks to the publishers and editors of journals and periodicals furnished in exchange; to the secretaries of State and national pharmaceutical associations for copies of the annual proceedings; to John Uri Lloyd, Cincinnati, for several eclectic medical journals; and to the officers of the library of the Department of Agriculture, the library of the Office of the Surgeon General, Washington, the library of the Philadelphia College of Pharmacy, the library of the Franklin Institute, and the library of the College of Physicians of Philadelphia for the use of reports and periodicals not on file in this laboratory. The compiler also desires to extend thanks to Harold Le Duc for his assistance in preparing the manuscript.

M. I. W.

DIVISION OF PHARMACOLOGY,
HYGIENIC LABORATORY,
August 17, 1915.

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Am. J. Clin. Med.—American Journal of Clinical Medicine, 1914, v. 21.

Am. J. M. Sc.—American Journal of the Medical Sciences, Philadelphia, 1914, v. 147, 148.

Am. J. Pharm.—American Journal of Pharmacy, Philadelphia, 1914, v. 86.

Am. J. Physiol.—American Journal of Physiology, Boston, 1914, v. 33, 34, 35.

Am. J. Public Health.—American Journal of Public Health, 1914, v. 4.

Am. J. Sc.—American Journal of Science, New Haven, 1914, v. 187, 188.

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Arb. pharm. Inst. Univ. Berl.—Arbeiten aus dem pharmazeutischen Institut der Universität, Berlin, 1914, v. 11.

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Ber. deutsch. pharm. Gesellsch.—Berichte der deutschen pharmazeutischen Gesellschaft, Berlin, 1914, v. 24.

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Biochem. J.—Biochemical Journal, Liverpool, 1914, v. 8.

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Pharm. Zentralh.—Pharmazeutische Zentralhalle für Deutschland, Dresden, 1914, v. 55.

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Therap. Monatsh.—Therapeutische Monatshefte, Berlin, 1914, v. 28.

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2. TITLE ABBREVIATIONS—PHARMACOPŒIAS AND NON-OFFICIAL STANDARDS.

Ph. Arg. I.—Farmacopea Nacional Argentina, Primera edición, 1898.
Ph. Austr. VIII.—Pharmacopœa Austriaca, editio octava, 1906.
Ph. Belg. III.—Pharmacopœa Belgica, editio tertia, 1906.
Ph. Brit. V.—British Pharmacopœia, 1914.
Ph. Chil. I.—Farmacopea Chilena, 1886.
Ph. Dan. VII.—Pharmacopœia Danica, 1907.
Ph. Fenn. V.—Pharmacopoea Fennica, edito quinta, 1914.
Ph. Fr. V.—Codex Medicamentarius Gallicus, Pharmacopée Française, 1908.
Ph. Germ. V.—Deutsches Arzneibuch, 5. Ausgabe, 1910.
Ph. Helv. IV.—Pharmacopœa Helvetica, editio quarta, 1907.
Ph. Hisp. VII.—Farmacopea Oficial Espanola, séptima edicion, 1905.
Ph. Hung. III.—Pharmacopœa Hungarica, editio tertia, 1909.
Ph. Ital. III.—Farmacopea ufficale del regno d'Italia, Terza edizione, 1909.
Ph. Japon. III.—The Pharmacopœia of Japan, 1906 (English translation, 1907).
Ph. Mex. IV.—Nueva Farmacopea Mexicana, cuarta edición, 1904.
Ph. Ndl. IV.—Pharmacopœa Nederlandica, editio quarta, 1905.
Ph. Norv. IV.—Pharmacopœa Novegica, editio quarta, 1913.
Ph. Ross. VI.—Pharmacopœa Rossica, sixth edition, 1910.
Ph. Serv. II.—Pharmacopœia Serbica, editio secunda, 1908.
Ph. Ven. I.—Farmacopea Venezolana, 1898.
U. S. P. VIII.—Pharmacopœia of the United States, 8th Dec. Rev., 1905.
N. F. III.—The National Formulary of Unofficial Preparations, Baltimore, 1906.
N. N. R.—New and Nonofficial Remedies, Chicago, 1914.
B. P. C.—British Pharmaceutical Codex, London, 1911.

DIGEST OF COMMENTS ON THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA AND ON THE NATIONAL FORMULARY.[1]

I. GENERAL COMMENTS.

1. LEGAL STATUS AND DEVELOPMENT.

1. PURE FOOD AND DRUGS LAW.

Fuller, H. C.: The food and drugs act has proven to be one of the most interesting and valuable pieces of legislation that has been enacted in this country for a long time. As a whole it has worked quite well, and certain features which have allowed technical violations have been corrected or an attempt is being made to correct them.—J. Am. Pharm. Assoc. 1914, v. 3, p. 133.

Wallis, James H.: The two minor reasons why the food and drug control work has not been more effective are lack of effective cooperation between food and drug control officials and insufficient educational work.—Pacific Pharm. 1914, v. 7, p. 283; also Drug. Circ. 1914, v. 58, p. 97.

Rogers, C. H.: The importance of food and drug chemistry in the United States. A review of efforts to enforce food and drug laws.—Proc. Minnesota Pharm. Assoc. 1914, p. 139–142.

Beal, James H.: The legislative problems of pharmacy. A review of the poison and antinarcotic laws and the general food and drug laws, with a plea for the need of solidarity for pharmacists.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1051–1061; also Proc. North Carolina Pharm. Assoc. 1914, p. 36–49.

Bevan, Archibald: Extreme care is needed in the drafting of legislation. A good part of the troubles of the druggists can be traced to loosely drawn statutes in which the original intention of the maker can neither be fathomed nor explained.—Pacific Drug Rev. 1914, v. 26, July, p. 23.

Woodruff, Charles M.: For manifest reasons additional drug legislation is not desirable and should be discouraged.—Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 321.

Wilson, R. C.: Our pharmacy laws are antiquated, inefficient, and ambiguous. They should be supplanted by laws under which we may be protected and under which we may conscientiously and intelligently practice, and which may be capable of enforcement.—Proc. Georgia Pharm. Assoc. 1914, p. 19.

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Dunn, Charles W.: The administration of State food and drug laws.—Oil, Paint & Drug Rep. 1914, v. 86, November 30, p. 50.

Editorial: The present-day methods of enforcing food and drug laws are hopelessly inadequate.—Nat. Drug Clerk, 1914, v. 2, p. 454–455.

Anon.: An announcement that the United States Chamber of Commerce is to study food and drug questions.—Am. J. Pharm. 1914, v. 86, p. 529–530; also J. Am. Pharm. Assoc. 1914, v. 3, p. 1609.

Anon.: Proceedings of the National Drug Trades Conference, Washington, D. C., January 13, 1914.—J. Am. Pharm. Assoc. 1914, v. 3, p. 261–271. See also p 744–747, and Oil, Paint & Drug Rep. 1914, v. 85, January 19, p. 32G.

News Note: Reprint of the resolutions adopted by the National Drug Trades Conference respecting proposed drug legislation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 590–592.

News Note: A report of the proceedings of the National Food Trade Conference, held at the Waldorf Astoria Hotel, New York City, February 27.—J. Am. Pharm. Assoc. 1914, v. 3, p. 584–587; also Am. Food J. 1914, v. 9, p 81–100.

Wallis, James H.: The food and drugs control work in the United States is not 50 per cent efficient. This is startling but true. The trouble lies in defective organization and utter lack of correlation of several branches of what really is but one subject.—Am. Food J. 1914, v. 9, p. 11; also Pacific Pharm. 1914, v. 7, p. 283.

West, Charles A.: The subject of uniform legislation does not grow threadbare by the handling, but rather takes on, like the chameleon, new hues and new values the more it is considered.—Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 24; also Proc. N. W. D. A. 1914, p. 115.

Wallace, John C.: Report of the delegates to the National Drug Trades Conference.—J. Am. Pharm. Assoc. 1914, v. 3, p. 191–196. See also N. A. R. D. Notes, 1914, v. 18, p. 1109.

Ryan, Frank G.: Manufacturing pharmacists should go on record as opposed to any change in the food and drug law which will repeal the so-called variation clause.—Proc. N. A. M. M. P. 1914, p. 20; also Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 32E, and West, Charles A.: v. 86, September 30, p. 25.

Woodruff, Charles M.: The members of the drug trade who are clamoring for the elimination of the drug-variation clause have no arguments to support their contentions and are accusing manufacturers of wanting to market substandard goods for fraudulent purposes.—Proc. N. A. M. M. P. 1914, p. 148.

Anon.: Reprint of the suggestions made by the Bureau of Chemistry regarding the proper labeling of medicinal preparations under the Sherley amendment.—Am. J. Pharm. 1914, v. 86, p. 523–525; also Pharm. Era, 1914, v. 47, p. 527, and Oil, Paint & Drug. Rep. 1914, v. 85, September 7, p. 41.

Wilbert, M. I.: The patent-medicine problem. A review of past activities of the American Pharmaceutical Association.—Am. J. Pharm. 1914, v. 86, p. 256–267.

Stanaland, H. G.: A plea for uniform labeling and a warning against the present haphazard methods employed by manufacturing pharmacists in labeling their products.—Drug. Circ. 1914, v. 58, p. 349. See also Abbott, William A.: Proc. Minnesota Pharm. Assoc. 1914, p. 27.

Lattimer, George W.: The abolishment of the guarantee legend on foods, drugs, and insecticides is to take effect in May, 1916.—Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 7.

Patch, E. L.: The continued activities under pure food and drug legislation are undoubtedly working toward better standards and greater carefulness, but there is still a tendency to allow the enforcement of regulations to become one-sided and work serious and uncalled-for injustice.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1283.

2. SALE AND USE OF POISONS.

Murray, B. L.: The need of a proper national poison law upon which officials, such as the postal officials, the producer, the dealer, and the consumer alike could rely, should be emphasized.—Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34; also Proc. N. W. D. A. 1914, p. 254.

Hemm, Francis: Observations on desirable restrictions on the sale of poisons. A uniform national law or a unification of State poison laws is at present badly wanted.—Meyer Bros. Drug. 1914, v. 35, p. 304.

Wilbert, M. I.: The need for greater uniformity in laws relating to the manufacture and sale and use of poisons and habit-forming drugs.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1168–1171.

Beal, James H.: In some States, in addition to that which is specifically known as the poison law, there may be two or three or a half a dozen other acts relating to the sale of poisonous drugs.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1054; also Proc. North Carolina Pharm. Assoc. 1914, p. 40.

Haussamen, H. L.: A definite specific ruling as to just what medicinal compounds, drugs, and medicines can be transmitted through the mail upon the prescriptions of licensed physicians will be greatly appreciated.—Proc. North Dakota Pharm. Assoc. 1914, p. 83.

Resolution adopted by the American Association of Pharmaceutical Chemists on the postal regulations forbidding the sending of poisons by the mails.—Pract. Drug. 1914, v. 32, p. 314. See also Proc. N. A. M. M. P. 1914, p. 77–78.

Lauber, Joseph E.: Safeguarding the use of poisons.—J. Am. Pharm. Assoc. 1914, v. 3, p. 257–259.

Cheatham, T. A.: Inspection of 640 retail drug stores in Georgia showed that 122 were without poison registers. In addition to this, 53 general dealers were found who were violating the poison law by selling various poisons of a dangerous nature.—Proc. Georgia Pharm. Assoc. 1914, p. 46.

Anon.: The need for educating the public regarding poisons.—J. Am. Pharm. Assoc. 1914, v. 3, p. 275–276.

Bowerman, K. B.: The question of a poison container is important and should be given serious consideration.—Pacific Drug Rev. 1914, v. 26, July, p. 17. See also Rees, D. R.: Proc. California Pharm. Assoc. 1914, p. 9–11, and Lackner, Rolph J.: New York M. J. 1914, v. 100, p. 1025.

Murray and Frame: Some aspects of our poison laws and of methods for defining a poison.—J. Am. Pharm. Assoc. 1914, v. 3, p. 663–667.

West, Charles A.: The question as to what is a poison and the question of uniform poison legislation will always be an issue until a Federal poison law is enacted.—Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 25; also Proc. N. W. D. A. 1914, p. 127.

Remington, J. P.: A poison, in the common acceptation of the word, is a substance that produces a deleterious action upon life; but this definition is too broad and general to be serviceable in food and drug legislation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 430. See also Northwestern Druggist, 1914, v. 15, April, p. 60.

Rees, R. D.: A poison has been found to be the most difficult thing to define. As generally understood, it is something that must be taken internally and of which you can not take a teaspoonful without fatal results.—Proc. California Pharm. Assoc. 1914, p. 8.

Emerson, J. C.: A poison may be defined as a substance which is fatal to animal life in quantity of 30 grains or less.—N. A. R. D. Notes, 1914, v. 1301.

Beal, J. H.: Definitions, as are found in the Pennsylvania poison law, which make the question of whether a drug should be labeled poison depend upon the quantity required to produce death must be discredited as impracticable.—J. Am. Pharm. Assoc. 1914, v. 3, p. 668.

Hemm, Francis: The poison schedule as now included in the law has outlived its usefulness and is in need of revision.—Proc. Missouri Pharm. Assoc. 1914, p. 49.

Wilbert, M. I.: The sale and use of poisons, with table showing the number of deaths by poisoning reported for 1911 and 1912 by the registrar-general of births, deaths, and marriages in England and Wales, and table showing the number of cases of accidental poisoning and of suicide by poisoning reported by the coroner of St. Louis for the years 1911 to 1914, inclusive.—Public Health Rep. 1914, v. 29, p. 3027–3030.

Fleury, Ferdinand: A review of some classical reports of cases of poisoning.—Pharm. Praxis, 1914, v. 12, p. 472–478.

3. SALE AND USE OF NARCOTIC DRUGS.

Whilden, Chas. B.: A review of the possibilities and objects of the Harrison bill to limit the manufacture and sale of certain narcotics to licensed persons.—Proc. California Pharm. Assoc. 1914, p. 45–48.

West, Charles A.: The Harrison bill in its amended form is in as satisfactory shape as we could expect it to be.—Proc. Am. Assoc. Pharm. Chem., 1914, p. 23.

Freericks, Frank H.: Comments on the Harrison bill.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1–4. See also Beal, J. H., p. 4–8. and 479–481.

Editorial: Announcement that the Harrison bill was signed by the President on Thursday, December 17, 1914.—N. A. R. D. Notes. 1914, v. 19, p. 551.

Beal, J. H.: The laws relating to the sale of habit-forming narcotic drugs are often a patchwork of overlapping statutes and incomplete.—Proc. North Carolina Pharm. Assoc. 1914, p. 40; also J. Am. Pharm. Assoc. 1914, v. 3, p. 1054.

Pritchard, B. E.: There is not a problem or an issue before the people of the United States to-day that is more vital than that of the curtailing of the use of narcotics and the controlling of their distribution to the laity.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 278.

Wiley, H. W.: All habit-forming drugs should be strictly interdicted to lay trade. This interdiction should not be coupled with the usual proviso which permits these habit-forming drugs to be sold in small quantities. A law with such a proviso is a farce.—Meyer Bros. Drug. 1914, v. 35, p. 336.

Burnet, James: It is more than time that new regulations were introduced in this country to check the indiscriminate distribution of drugs to the public.—Lancet, 1914, v. 187, p. 523.

Frary, Guy E.: The dispensing of habit-forming drugs by physicians should be prohibited, and these substances and preparations should only be dispensed by registered pharmacists under a physician's written prescription.—Proc. South Dakota Pharm. Assoc. 1914, p. 86.

Cheney, Frank J.: The dispensing doctor is responsible for at least 95 per cent of the habitual users of opium and its compounds and alkaloidal salts.—Oil, Paint & Drug Rep. 1914, v. 85, May 18, p. 33.

Schnaidt, H. J.: Considerable complaint has been made during the past year that in a number of places druggists are supplying habit-forming drugs to persons who should not be allowed to obtain them.—Proc. South Dakota Pharm. Assoc. 1914, p. 13.

Johnston, A. C.: Report on narcotic investigations in Ohio. Illustrated.—Rep. Ohio D. & F. Div. 1914, p. 49–53.

Wilbert, M. I.: Sale and use of cocaine and narcotics, with table showing the quantities of the several drugs entered for consumption in the United States during the years 1910–1913.—Public Health Rep. 1914, v. 29, p. 3180–3183.

Bleuler, E.: The habituation to drugs. An attempt to correct the same.—Münch. med. Wchnschr. 1914, v. 61, p. 605–606.

Lichtenstein, Perry M.: Narcotic addiction. Based on observations and treatment of 1,000 cases.—New York M. J. 1914, v. 100, p. 962–966.

Brown, Lucius P.: Up to April 1, 1914, the Pure Food and Drug Department of Tennessee has issued 1,403 permits to refill prescriptions, of which very few were renewals of existing permits.—J. Am. M. Assoc. 1914, v. 62, p. 1427.

Kennedy, Foster: The effects of narcotic drug addiction. Morphinism is a disease, in the majority of cases initiated, sustained, and left uncured by members of the medical profession.—New York M. J. 1914, v. 100, p. 20–22.

Terry, C. E.: Nature and origin of drug addiction.—Am. J. Public Health, 1914, v. 4, p. 30–32.

Bishop, Ernest S.: Up to the present time altogether too little attention has been paid to narcotic addiction as a disease.—J. Am. M. Assoc. 1913, v. 60, p. 431.

Douglas, C. J.: The institutional treatment of drug addiction. There is no chronic disease known to medicine that is more surely curable than morphinism.—New York M. J. 1914, v. 99, p. 127–128.

König, H.: The prognosis in morphine addiction.—Berl. klin. Wchnschr. 1914, v. 51, p. 1061–1064. See also J. Am. M. Assoc. 1914, v. 63, p. 204.

4. SALE AND USE OF HOUSEHOLD REMEDIES.

Zinn, C. E.: The term "household remedies" has not been defined, and it is pretty hard to draw the line as to what they are.—Proc. Missouri Pharm. Assoc. 1914, p. 54.

Dunn, Charles Wesley: A "domestic remedy" is a remedy usually manufactured by a person not connected with the medical or pharmaceutical professions and always sold to the public through the several retail channels.—N. A. R. D. Notes, 1914, v. 18, p. 769.

Drew, Chas. W.: One of the most deplorable habits of the American people is that of habitually taking medicine upon their own initiative.—Proc. South Dakota Pharm. Assoc. 1914, p. 33.

Kemp, Ervin F.: Self-medication, so called, is sure to increase. With growth of intelligence and knowledge along hygienic and preventive lines will come greater reliance in self-diagnosis.—Western Druggist, 1914, v. 36, p. 363.

Engelhard, George P.: Proprietary medicines in their relations to the people, to pharmacy, and the medical profession.—Western Druggist, 1914, v. 36, p. 210–213.

Editorial: The freedom allowed to quackery in this country is unreasonable. To estimate properly the effect of drugs on the progress of disease in the human body is one of the most difficult of tasks even for highly trained observers.—Nature, 1914, v. 94, p. 365–366.

Anon.: The Nation's medicine bill. Reprint of portion of an article from Public Health Reports.—Spatula, 1914, v. 21, p. 89.

Dowling, Oscar T.: The practice of having general stores handle medicine is fraught with grave danger to the public.—Proc. Louisiana Pharm. Assoc. 1914, p. 25.

Beal, J. H.: A form of law proposed for the regulation of the itinerant vending of drugs, medicines, and poisons.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1690–1694.

Ladd, E. F.: There is needed a law that will prohibit the sale of any patent medicine or proprietary product that has not been registered under the provisions of a State law requiring that the formula shall be accurately stated, qualitatively and quantitatively, in the language, descriptions, and abbreviations used in the U. S. P. or other accepted pharmacopœias or formularies.—Proc. South Dakota Pharm. Assoc. 1914, p. 110.

Barnard, H. E.: The waste of money in the purchase of patents, proprietaries, and toilet preparations is astonishingly great, and in spite of the activities of the Federal Government and State departments, the people are as credulous as before any attempt was made to enlighten them.—Rep. Indiana Bd. Health, 1914, p. 440.

Street, John Phillips: A report of the analyses of 130 proprietary medicines.—Rep. Connecticut Agric. Expr. Sta. 1914, p. 256–332.

Frary, Guy E.: The legal definition of a drug should be changed to include medicines for internal or external use, and also antiseptics and cosmetics.—Proc. South Dakota Pharm. Assoc. 1914, p. 85.

Roemer, John: A general discussion of the patent medicine problem.—Proc. New York Pharm. Assoc. 1914, p. 286.

Wilbert, M. I.: The patent medicine problem.—J. Am. Pharm. Assoc. 1914, v. 3, p. 572–577.

Utech, P. Henry: Our attitude toward "fake" proprietaries.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 355–356.

Anon.: Government suggestons to manufacturers of proprietary labels in regard to what not to claim and how to comply with the Sherley amendment.—Am. Druggist, 1914, v. 62, p. 395. See also Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 32 I.

Editorial: Comment on the labeling suggestions published by the Department of Agriculture.—Bull. Pharm. 1914, v. 28, p. 487.

Schiedat, M.: The present conditions in the traffic in secret remedies, with special consideration of their future regulation.—Vrtljschr. ger. Med. 1914, v. 48, p. 349–381.

Anon.: A summary of the report of the select committee on patent medicines, appointed by the treasury in May, 1912.—Brit. M. J. 1914, v. 2, p. 404–405. See also Pharm. J. 1914, v. 93, p. 318–319; also p. 315, and Science, 1914, v. 40, p. 374–375.

Editorial: A blue book containing the report of the select committee on proprietary medicines, together with the minutes of evidence, has been published.—Pharm. J. 1914, v. 93, p. 549. See also Am. J. Pharm. 1914, v. 86, p. 561.

Sewill, Henry: Secret remedies and pharmacy law amendment.—Brit. M. J. 1914, v. 2, p. 522.

Anon.: A list of names of widely used nostrums, compiled by the Ohio Agriculture Commission, is reprinted.—N. A. R. D. Notes, 1914, v. 18, p. 472–473.

Anon.: The latest list published by the Internal Revenue Bureau of medicinal preparations that are too alcoholic.—N. A. R. D. Notes, 1914, p. 336–339.

5. DRUG INSPECTION WORK.

Bernstein, Ernest: A drug store should be a place where nothing is obtainable but drugs and where all the activities and energies, all the thoughts, of the owners and employees are devoted to this.—Proc. Louisiana Pharm. Assoc. 1914, p. 31.

Taylor, George B.: A report on carelessness in the filling of simple prescriptions in the State of Louisiana.—Rep. Louisiana Bd. Health, 1912, 1913, p. 176–187.

Patch, E. L.: Reports of various boards show that there is still remarkable variation in the strength of simple products as supplied by the retailer.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1284.

Hemm, Francis: Fifty per cent of the druggists in Missouri are running their stores illegally and pharmacists should insist that the board of pharmacy correct this condition just as quickly as possible.—Proc. Missouri Pharm. Assoc. 1914, p. 65.

Wilson, R. C.: The drug inspector and the commissioner are powerless to carry on their work unless supported by druggists themselves. The officials stand ready and willing to make drug inspection just as real and efficient as is indicated by the support given by the retail druggist.—Proc. Georgia Pharm. Assoc. 1914, p. 16.

Caspari, Charles M.: Thousands of samples have been examined and hundreds of them have been found to vary from the pharmacopœial standard.—Proc. Maryland Pharm. Assoc. 1914, p. 73.

Barnard, H. E.: During the year 399 drug samples have been examined. Of this number 257 were passed as legal and 142, or 35.5 per cent, as illegal.—Rep. Indiana Bd. Health, 1914, p. 439.

Lythgoe, Hermann C.: Of 229 samples of drugs examined, 50 were found to be adulterated or varying from the legal standard.—Bull. Massachusetts Bd. Health, 1914, v. 9, p. 243.

Newcomb, George D.: Of a total number of 116 samples analyzed by the State laboratory, 35 were found to be below standard. Twenty-two of these samples below standard were found to contain methyl alcohol.—Proc. Iowa Pharm. Assoc. 1914, p. 28.

Lythgoe, Hermann C.: Of 1,393 samples of drugs examined, 204 were found to be adulterated, and 1,189 were found to be genuine.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 411.

Congdon, Leon A.: During the fiscal year ending July 1, 1913, 211 drug samples were examined, of which 149 were found to be up to standard. During the year ending July 1, 1914, 393 drug samples were examined, 84 of which were found to be of standard quality, and 207 were found to be above or below standard, 61 above and 146 below.—Rep. Kansas Bd. Health, 1914, p. 100.

Todd, A. R.: The results of the Michigan Dairy and Food Commission show that for the year ending July 1, 1911, a total of 631 samples were analyzed, of which number 357, or 56.5 per cent, were adulterated. In 1912, 282 were analyzed, 160, or 56.7 per cent, of which were adulterated. In 1913, 504 were analyzed, 252, or 50 per cent, being adulterated. In 1914, 571 were analyzed and 214, or 37.5 per cent, were adulterated.—Rep. Michigan D. & F. Com. 1914, p. 175.

Porter, C. A.: Two hundred and seventy-nine samples of 12 different articles were examined, and of this number 173 were found to be adulterated, or 62 per cent were either above or below standard. It is just as much against the law for an article to be 125 per cent as 75 per cent.—Proc. Kentucky Pharm. Assoc. 1914, p. 110.

Stallings, R. E.: The analyses of drugs show that some druggists are quite careless in making their preparations.—Proc. Georgia Pharm. Assoc. 1914, p. 52.

Wilbert, M. I.: A summary of the results of analyses of 26 official articles reported on in Hygienic Laboratory Bulletin No. 93.—

Public Health Rep. 1914, v. 29, p. 1137–1144; also Am. J. Pharm. 1914, v. 86, p. 550–558.

Murray, B. L.: Probably one of the greatest laxities in handling drugs and chemicals lies in the use of poor containers.—Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Allen, R. M.: An investigation is to be made among pharmacists into the methods of storing perishable drugs, and the weights and measures used in filling prescriptions.—Rep. Kentucky Agric. Exper. Sta. 1911–1913, Lexington, 1914, p. 3.

Lythgoe, Hermann C.: It has been shown that the largest amount of fraudulent adulteration and substitution is practiced by the small dealers.—Bull. Massachusetts Bd. Health, 1914, v. 9, p. 269.

Metz, Herman A.: Substitution and drug counterfeiting may entail the sacrifice of human life and the permanent impairment of health.—Montreal Pharm. J. 1914, v. 25, p. 94–96.

Sudro, W. F.: It is generally recognized that once a seal is broken, a package opened, or a cork drawn the manufacturer can no longer be held responsible for the contents of the package; the pharmacist assumes all responsibility for the nature and purity of the article.—Rep. North Dakota F. Com. 1914, p. 30. See also Brown, L. A.: Proc. Kentucky Pharm. Assoc. 1914, p. 123.

6. THE PHARMACOPŒIA AS A LEGAL STANDARD.

Beal, J. H.: The relation of the U. S. P. to the law and to the general public.—Western Druggist, 1914, v. 36, p. 399–402, and Am. Druggist, 1914, v. 62, p. 447–449.

Remington, J. P.: The Pharmacopœia is essentially a book of standards. Many men of many minds have contributed to its pages.—Am. Druggist, 1914, v. 62, p. 202. See also Proc. West Virginia Pharm. Assoc. 1914, p. 87.

Woodruff, Charles M.: The United States Pharmacopœia for the purposes for which it was primarily intended is a commendable enterprise. Too much can not be said in its favor.—Proc. N. A. M. M. P. 1914, p. 150; also Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 321.

Noyes, C. R.: The Pharmacopœia is a thoroughly practical as well as scientific standard. The requirements in the Pharmacopœia are in almost every case especially suitable for medicinal purposes.—J. Am. Pharm. Assoc. 1914, v. 3, p. 605; also Proc. Minnesota Pharm. Assoc. 1914, p. 188.

Stewart, F. E.: The U. S. P. is the law of the land, not only for interstate commerce, but also for State commerce in most of the States.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1166.

Nitardy, F. W.: While jobbers at first did not carry such things as U. S. P. alcohol, turpentine, and linseed oil, they are now obtainable by reason of shipping back a few things not of standard quality.—J. Am. Pharm. Assoc. 1914, v. 3, p. 699.

Diner, J.: The Pharmacopœia, it is admitted, is a good many years behind the times. It is thought a sacred book; though if age is any criterion, some of the formulas contained therein might be considered sacred.—J. Am. Pharm. Assoc. 1914, v. 3, p. 460.

Todd, A. R.: Suggestions for a better U. S. P. and N. F. and difficulties encountered in the enforcement of the drug law in regard thereto.—Rep. Michigan D. & F. Com. 1914, p. 190–191.

Vanderkleed, C. E.: The U. S. P. IX will find an entirely different state of affairs as regards the condition of the drug market and will be received into a much clarified atmosphere.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 125.

7. SUPPLEMENT TO THE PHARMACOPŒIA.

Remington, J. P.: It is not the intention in the future to wait for the usual period of 10 years to issue a supplement, and any addition or deletion which may become necessary will be published, so that the book may be kept more fully abreast with the times.—J. Am. Pharm. Assoc. 1914, v. 3, p. 866. See also Northwestern Druggist, 1914, v. 15, April, p. 60.

McClain, H. W.: In former revisions of the U. S. P. the book has been about 10 years behind the times. In the present revision new methods are being used and we are promised that the new U. S. P. will not only be up to date but will be kept up to date by the publication of supplements from time to time as circumstances require.—Proc. South Dakota Pharm. Assoc. 1914, p. 45; also Northwestern Druggist, 1914, v. 15, September, p. 25.

Editorial: There is an evident demand for local pharmacopœias and formularies. It is to be regretted that such a small modicum of care and skill has sometimes been utilized in their preparation.—Pharm. J. 1914, v. 93, p. 550.

Stebra-Böhm, Johann: The Elenchus to the Ph. Austr. VIII is not satisfactory. A number of medicaments are prescribed in the several formulas for which tests are not given in the body of the book.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 299.

8. UNITED STATES PHARMACOPŒIAL CONVENTION.

Beal, J. H.: The United States Pharmacopœial Convention represents the professions of medicine and pharmacy in the United States in the broadest possible way. It represents all recognized schools of medicine and their professional organizations; it represents those who manufacture and deal in drugs and medicinal products, those who employ them in the treatment of disease, and those who interpret and apply the laws relating to these subjects.—Western Druggist, 1914, v. 36, p. 400, and Am. Druggist, 1914, v. 62, p. 447.

Remington, J. P.: The United States Pharmacopœial Convention is a distinctly American organization. No such pharmacopœial organization exists in Europe or any other part of the world. The medical and pharmaceutical professions are equally represented.—Proc. West Virginia Pharm. Assoč. 1914, p. 83–84. See also Northwestern Druggist, 1914, v. 15, April, p. 60.

9. GENERAL PRINCIPLES.

Remington, J. P.: In the revision of the United States Pharmacopœia hearings have been already held: in fact the present Pharmacopœia is being thoroughly revised in public.—J. Am. Pharm. Assoc. 1914, v. 3, p. 429: also Northwestern Druggist, 1914, v. 15, April, p. 60.

Anon.: Publicity as to the forthcoming changes was ordered by the convention of 1910. The proposed changes are now being published in the journal of the American Pharmaceutical Association. It is anticipated that the book itself will be on the market before the close of the present calendar year.—Meyer Bros. Drug. 1914, v. 35, p. 211; also Proc. Missouri Pharm. Assoc. 1914, p. 127.

10. PUBLICATION AND CONTROL.

Remington, J. P.: The work of revising the U. S. P. is fast approaching completion. It is expected that printing in galley will begin July 1.—J. Am. Pharm. Assoc. 1914, v. 3, p. 863; also Pharm. Era, 1914, v. 47, p. 460.

McClain, H. W.: The ninth revision of the Pharmacopœia is nearly finished. Printing in galley has already been in progress for several weeks. It is expected that mechanically as well as otherwise the new Pharmacopœia will be more nearly perfect than former editions have been.—Proc. South Dakota Pharm. Assoc. 1914, p. 46.

Whelpley, H. M.: It is anticipated that the Pharmacopœia will be on the market before the close of the present calendar year (1914).—Proc. Missouri Pharm. Assoc. 1914, p. 127.

Schnaidt, H. J.: The new Pharmacopœia of the United States will be out some time in January.—Proc. South Dakota Pharm. Assoc. 1914, p. 14.

Remington, J. P.: The correction of the proof for the Pharmacopœia should be completed by March 1. Three to four months must then elapse before the Pharmacopœia can be enforced. This will probably make the date July 1, 1915.—Pharm. Era, 1914, v. 47, p. 460; also Proc. Vermont Pharm. Assoc. 1914, p. 88.

Worrall, Harry: The eighth revision of the Pharmacopœia was published about July 1, 1905, and a copy was with difficulty obtained by July 26. It became official on September 1, 1905. It was generally considered a very arbitrary procedure because of the short time given in which to prepare for a number of very important changes.—N. A. R. D. Notes, 1914, v. 18, p. 314.

Cristianson, Lars: The Pharmacopœia of the United States should be printed on better paper and have a better binding.—N. A. R. D. Notes, 1914, v. 18, p. 203. See also Sloan, B., p. 156.

Anon.: It was decided by the committee on National Formulary to make the N. F. IV consistent with the U. S. P. IX and to publish both standard books at the same time and thereby avoid any duplication in formulas.—Pract. Drug. 1914, v. 32, p. 412.

Kressin, L. H.: The new U. S. P. and N. F. will be in our midst very soon and that will be the time to start your propaganda work with renewed interest.—Proc. Wisconsin Pharm. Assoc. 1914, p. 17.

11. THE PHYSICIAN AND THE PHARMACOPŒIA.

Chambers, H. L.: A Pharmacopœia for the physician and the dispensing druggist.—J. Am. Pharm. Assoc. 1914, v. 3, p. 51–54.

Blosmo, O. J.: Fewer patents and proprietaries are being used at the present time and doctors are more particular in respect to the quality and standard of drugs.—J. Am. Pharm. Assoc. 1914, v. 3, p. 603.

Roemer, John: If the U. S. P. and N. F. are to act as a link between the physician and the pharmacist then these books must include some information useful to the physician.—J. Am. Pharm. Assoc. 1914; v. 3, p. 460.

Chambers, H. L.: There are five points concerning each preparation that are of vital interest and importance to physicians: (1) Preservation, (2) incompatability, (3) physiological action (including toxicology), (4) therapy, (5) synergism.—J. Am. Pharm. Assoc. 1914, v. 3, p. 53.

Needham, R. H.: Physicians and prescription writing: a criticism.—J. Am. Pharm. Assoc. 1914, v. 3, p. 961–963.

Fantus, Bernard: To the question, Has the quality of prescription writing improved or deteriorated within the last ten years? Fifty-five per cent reported an improvement, and 20 per cent a deterioration.—J. Am. Pharm. Assoc. 1914, v. 3, p. 596.

Kreig, Arch.: The Pharmacopœia should be a necessary book, a ready reference book, and familiarity with it should be one of the compulsory requirements to the practice of medicine.—Proc. West Virginia Pharm. Assoc. 1914, p. 77.

Remington, J. P.: In the great medical schools of this country, the Pharmacopœia is almost an unused book. The medical professors do not teach the Pharmacopœia any more than they can possibly help. They do not instruct the young physicians to prescribe official products.—Proc. West Virginia Pharm. Assoc. 1914, p. 83.

12. VALUE OF CRITICISM.

Remington, J. P.: The eighth revision has had the advantage of a Digest of Comments Published by the Public Health Department of the Government, by which the principle of publicity was greatly extended. Of course it will be impossible to embody every bit of advice which is now in the hands of the chairman of revision.—J. Am. Pharm. Assoc. 1914, v. 3, p. 429–430; also Northwestern Druggist, 1914, v. 15, April, p. 60.

Whelpley, H. M.: Not only members of our committee on Pharmacopœia, but all who feel interested in the Pharmacopœia and National Formulary should study the Digest of Comments on the U. S. P. and N. F., published by the United States Public Health Service, Washington, D. C.—Proc. Missouri Pharm. Assoc. 1914, p. 128.

A book review of Hygienic Laboratory Bulletin No. 93 says in part: This work is of inestimable value to those who are in any way interested in the U. S. P. Only through a careful study of these documents is it possible to obtain an idea of the enormity of the task of revising a work like the U. S. P. which is to serve as a standard for the drugs used in the treatment of disease.—Pacific Pharm. 1914, v. 8, p. 42–43.

A book review of Hygienic Laboratory Bulletin No. 87 commends the publication to all who have occasion to look up literature relating to drugs and their preparations. The publication reviews no less than 245 periodicals.—Chem. Weekblad, 1914, v. 11, p. 302.

The American Pharmaceutical Association adopted the following recommendation from the scientific section: "It is recommended by the scientific section that the American Pharmaceutical Association express to the Surgeon General of the Public Health Service its appreciation of the publication of 'Digest of Comments on the U. S. Pharmacopœia and National Formulary,' and that it requests the continuance of this publication, if possible, more promptly."—J. Am. Pharm. Assoc. 1914, v. 3, p. 1504.

13. COMMITTEE OF REVISION.

Beal, J. H.: The Pharmacopœial Convention elects and instructs a general committee of revision of 50 members, and this general committee of 50 appoints from its members an executive committee of 15, which has immediate charge of the researches and investigations, all of which, however, are subject to the approval of the general committee.—Western Druggist, 1914, v. 36, p. 400, and Am. Druggist, 1914, v. 62, p. 447.

Roemer, John: The revision committee of the U. S. P. rests on antiquated prejudices of 100 years ago in revising the U. S. P.—J. Am. Pharm. Assoc. 1914, v. 3, p. 460.

Remington, J. P.: The spirit which actuates both committees and the chairman is to get the best, without fear or favor. Publicity has been a prominent feature in this revision. For the first time in pharmacopœia building have the changes and standards and tests been published in advance of the approval of the final text. This has been done to permit anyone to frame a criticism or propose an improvement.—J. Am. Pharm. Assoc. 1914, v. 3, p. 864; also Am. Druggist, 1914, v. 62, p. 201.

Rogers, T. B.: At least one veterinarian should be added to the revision committee or veterinary surgeons should get together and issue a veterinary pharmacopœia.—Am. Vet. Rev. 1914, v. 44, p. 608.

14. NATURE AND PROGRESS OF REVISION.

Remington, J. P.: The revision of the United States Pharmacopœia. A review of the progress to date.—Pract. Drug. 1914, v. 32, p. 332–334. See also Western Druggist, 1914, v. 36, p. 69–70, Am. Druggist, 1914, v. 62, p. 89–90, and J. Am. Pharm. Assoc. 1914, v. 3, p. 429–431, 963–967.

Beal, J. H.: The method of making the Pharmacopœia of the United States.—Western Druggist, 1914, v. 36, p. 400, and Am. Druggist, 1914, v. 62, p. 447.

Editorial: Pharmacopœial revision, as carried on in this country, lacks coordination and is attended with considerable unnecessary delay due to the wide separation of the various individual revisors and the lack of a central bureau or laboratory for checking up the results of individual investigations.—N. A. R. D. Notes, 1914, v. 17, p. 1181.

Mittelbach, Wm.: A glimpse into the new Pharmacopœia, with some suggestions as to probable nature and composition.—Proc. Missouri Pharm. Assoc. 1914, p. 106–107. See also McClain, H. W.: Proc. South Dakota Pharm. Assoc. 1914, p. 45–46.

Remington, J. P.: Some of the novel features to be embodied in the U. S. P. IX.—Proc. West Virginia Pharm. Assoc. 1914, p. 64–67. See also Dickman, George C.: Proc. New York Pharm Assoc. 1914, p. 109–110.

Editorial: The general indications are that the monographs in the U. S. P. IX, will be quite an advance upon those included in the present Pharmacopœia.—Chem. & Drug. 1914, v. 84, p. 565–566.

Anon.: Pharmacopœial revision notes, including comments on the Pharmacopœia of the United States and liberal abstracts from part 1 of the Abstract of Proposed Changes.—Year-Book of Pharmacy, 1914, p. 154–165.

2. SCOPE.

1. NATURE AND CONTENT OF THE PHARMACOPŒIA.

Editorial: As now seems probable there will be 798 articles in the new book, as compared with 958 articles in the text of the present Pharmacopœia, and 994 articles in the U. S. P. of 1890.—Pharm. Era, 1914, v. 47, p. 258.

Editorial: The two legal standards, the Pharmacopœia and the National Formulary, contain some 1,500 drugs and preparations, and, according to the best available information, these represent all that is good in medicine.—N. A. R. D. Notes, 1914, v. 19, p. 565.

Dittmeyer, W. E.: The objects of the Pharmacopœia in recent years has been to simplify it and reduce it down to simple formulas. The necessary formula is and should be kept in a separate book.—Proc. Virginia Pharm. Assoc. 1914, p. 80.

Beal, H. H.: A pharmacopœia must always follow the practice of medicine not precede it.—Western Druggist, 1914, v. 36, p. 402, and Am. Druggist, 1914, v. 62, p. 449.

Remington, J. P.: One of the important questions now before the committee of revision is will the manufacturers be willing to permit their preparations to be admitted to the Pharmacopœia with tests of purity and identity, under another name.—Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 32K. See also Proc. N. A. M. M. P. 1914, p. 32, and Am. Druggist, 1914, v. 62, p. 202.

Ransford-Gay, St. Claire, M.: If our national standards were really useful, the Pharmacopœia would not be 10 years behind the times, and the N. F. a book of poor duplicates of proprietary preparations, instead of each being a living testimonial to the professions both of pharmacy and of medicine.—J. Am. Pharm. Assoc. 1914, v. 3, p. 432.

Cook, E. Fullerton: To the U. S. P. is conceded the right to first choose in the entire field of materia medica those substances or preparations in the eligible class.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1300.

Kreig, Arch.: Each drug, chemical and compound in the Pharmacopœia should be concisely stated. The book should be doubly indexed so that the busy physician can turn to a remedy and see for what it is useful, or turn to an index of human ills and find what remedies are available for their amelioration. Average doses should be given and in case of poisons the antidote and how to apply it.—Proc. West Virginia Pharm. Assoc. 1914, p. 78.

2. THE PHARMACOPŒIA AS A TEXTBOOK.

Woodruff, Charles M.: The United States Pharmacopœia is now a decennial record of some of the achievements and triumphs of manufacturing pharmacy; but it is a private enterprise.—Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 321.

Curry, Gordon L.: The Pharmacopœia and no other work is the standard and the Pharmacopœia and no other text should be used in the manufacture of official preparations.—Proc. Kentucky Pharm. Assoc. 1914, p. 56.

Hower, W. R.: The cause of much of the trouble of former years, namely, that of using old and obsolete formulas in manufacturing U. S. P. and N. F. products, seems to have been entirely eliminated.—Rep. Ohio D. & F. Div. 1914, p. 43.

Floyd, Henry B.: But two in five drug stores in the District of Columbia possess the eighth revision of the U. S. P., and but one in every five can boast of possessing the last edition of the National Formulary.—J. Am. Pharm. Assoc. 1914, v. 3, p. 569.

Tupper, Edward A.: The rule adopted by the board to have candidates bring to the practical examination their U. S. P. and National Formulary, making preparations therefrom as directed, has been found eminently satisfactory, as this tests the candidates' ability to make preparations which should be made in every drug store.—Proc. Minnesota Pharm. Assoc. 1914, p. 56.

Hostmann, Jeannot: Necessary apparatus in a retail pharmacy. Every pharmacist should have as an adjunct to an up-to-date prescription department a complete set of chemical apparatus, such as is necessary to perform the simpler tests and assay methods of the U. S. P.—J. Am. Pharm. Assoc. 1914, v. 3, p. 697-699.

Xrayser II: In the Ph. Brit. V the general medical council has issued a book that nine-tenths of the retail trade will rarely open.—Chem. & Drug. 1914, v. 85, p. 517.

3. A LIMITED MATERIA MEDICA.

Rogers, T. B.: The tendency in certain quarters to restrict our materia medica is to be regretted.—Am. Vet. Rev. 1914, v. 44, p. 607.

Editorial: The preparations of the U. S. P. and the N. F. are bona fide, active medicinal agents, but the medical men have little knowledge of this armamentarium, the best in the world.—N. A. R. D. Notes, 1914, v. 19, p. 565.

Wilbert, M. I.: The proposed list of useful drugs; a review with analyses of the list adopted by the council on pharmacy and chemistry of the American Medical Association.—J. Am. Pharm. Assoc. 1914, v. 3, p. 932–936.

Book Review: Handbook of Useful Drugs. The object of this book is to present a selected list of important drugs suggested for the use of teachers of materia medica and therapeutics, and to serve as a basis for the examination in therapeutics of State medical examining and licensing boards. The book represents a much needed advance in therapeutics by tacitly repudiating a large number of useless drugs.—J. Am. M. Assoc. 1914, v. 62, p. 1984.

Book review of "Useful Drugs" says, in part: "It does not require the gifts of a seer or the abilities of a prophet to venture the opinion that this rather diminutive volume of 167 pages is destined in the near future to have a decidedly far-reaching influence on the teaching and on the practice of therapeutics, and consequently is designed to have an equally important bearing on the future development of pharmacy and the efficiency of pharmacists generally."—Am. J. Pharm. 1914, v. 86, p. 45. See also Editorial: Drug. Circ. 1914, v. 58, p. 66, and Pharm. J. 1914, v. 92, p. 278.

4. NOMENCLATURE.

Rousseau, C.: A proposition for the unification of pharmaceutical nomenclature, with a table showing the language used for the main titles in the principal pharmacopœias of the world.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 1, p. 195–237. See also Svensk farm. Tidskr. 1914, v. 18, p. 11–13, 27–29, 58, 76–77, 292–293.

Martin, Henri: Pharmaceutical names considered as commercial trade-marks.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 1, p. 135–141.

Wilbert, M. I.: Pharmacopœial titles for new remedies. A compilation showing the titles included in several of the foreign pharmacopœias.—J. Am. Pharm. Assoc. 1914, v. 3, p. 652–655.

Rehwald, Max: Observations on chemical and pharmaceutical nomenclature and the desirability of developing names that will eliminate all doubt as to the composition of any given article or preparation.—Pharm. Ztg. 1914, v. 59, p. 143–144. See also Drug. Circ. 1914, v. 58, p. 207, and Am. Druggist, 1914, v. 62, p. 450–454.

Editorial: Complex chemical titles are inconvenient to say the least, and it would seem wise where these products are recognized in the U. S. P. that a short and concise name be devised.—Midl. Drug. 1914, v. 48, p. 564.

Remington, J. P.: We are going to have an official abbreviation after each medicine. No pharmacopœia in the world has ever had such a thing as an official abbreviation.—Proc. West Virginia Pharm. Assoc. 1914, p. 85; also Proc. Vermont Pharm. Assoc. 1914, p. 85–95.

Editorial: No material change has been made in the nomenclature of the Ph. Brit. V.—Pharm. J. 1914, v. 93, p. 447. See also Brit. M. J. 1914, v. 2, p. 720.

Heebner, Chas. F.: The absence of uniformity in the nomenclature of the Ph. Brit. is still almost as prominent as in the former Pharmacopœia.—Canadian Pharm. J. 1914, v. 48, p. 206.

Anon.: One novel feature of the Ph. Brit. V of which the utility is doubtful, is the appearance of an appendix of abbreviated Latin names of drugs and preparations.—Practitioner, 1914, v. 93, p. 855. See also Editorial: Lancet, 1914, v. 187, p. 902, and Brit. M. J. 1914, v. 2, p. 798.

Editorial: Pharmacopœial synonyms have given the drug trade a great deal of trouble. We hope the abbreviations included in the Ph. Brit. V may never be put forward as legally binding.—Chem. & Drug. 1914, v. 85, p. 480. See also Am. J. Pharm. 1914, v. 86, p. 560, and Oil, Paint & Drug Rep. 1914, v. 86, October 19, p. 33.

McWalter, J. C.: The Ph. Brit. V gives its sanction to such dangerous monstrosities as "lin. sap" and "æth."—Chem. & Drug. 1914, v. 85, p. 530.

McNeil, Robert: The idea suggested by the council on pharmacy and chemistry of the American Medical Association to change titles of various formulas from therapeutic to drug names is an excellent one, and its adoption by manufacturers generally would prove that the interests of the physicians are paramount.—Proc. Am. Assoc. Pharm. Chem, 1914, p. 186.

Gordon, Frederick T.: The nomenclature of the homœopathic Pharmacopœia of the United States seems unsystematic, as there are several different terminations used for metals and no attempt is made to distinguish by termination or form between alkaloids, glucosides, or other organic salts.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1712.

5. PUBLICITY.

Remington, J. P.: For the first time in pharmacopœial revision an abstract of changes in standards is being published in advance in the Journal of the American Pharmaceutical Association and other journals.—Proc. West Virginia Pharm. Assoc. 1914, p. 66; also J. Am. Pharm. Assoc. 1914, v. 3, p. 429, 866, and Pract. Drug. 1914, v. 32, p. 333.

Lattimer, George W.: The committee of revision of the U. S. P. is to be commended on the methods used for publicity, by publishing in the drug, chemical, and medical journals abstracts of the different sections, in order to secure suggestions and comments from those generally interested throughout the country.—Proc. N. W. D. A.

1914, p. 29. See also Proc. New York Pharm. Assoc. 1914, p. 108–109, and Mittelbach, Wm.: Proc. Missouri Pharm. Assoc. 1914, p. 106.

Mayer, Joseph: The committee of revision should issue lists of items to be included in the U. S. P. more frequently.—J. Am. Pharm. Assoc. 1914, v. 3, p. 460.

Remington, J. P.: This is the first instance in the world where a new pharmacopœia has been published in the pharmaceutical journals practically before the book was issued.—Proc. N. A. M. M. P. 1914, p. 32; also Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 32J.

Editorial: The preface to the Pharmacopœia should receive wide publicity in order that the best trained minds in the pharmaceutical profession may be given an opportunity to criticize it constructively.—Pract. Drug. 1914, v. 32, p. 324.

Remington, J. P.: An Abstract of Proposed Changes with New Standards and Descriptions, Part 2.—J. Am. Pharm. Assoc. 1914, v. 3, p. 359–416, Part 3, p. 524–552, Part 4, p. 984–997, Part 5, p. 1100–1110, Part 6, p. 1563–1583; also as reprints.

Part 1 of the Abstract of Proposed Changes with New Standards and Descriptions for the U. S. P. IX is reprinted.—Merck's Rep. 1914, v. 23, p. 12ff. See also Pacific Drug Rev. 1914, v. 26, February, p. 18ff.

6. TIME OF PUBLICATION.

Remington, J. P.: The revision of the U. S. P. VIII is nearing completion and the U. S. P. IX will undoubtedly be in the hands of the publishers this year, possibly by July 1.— J. Am. Pharm. Assoc. 1914, v. 3, p. 461. See also Am. J. Pharm. 1914, v. 86, p. 290.

Editorial: An important announcement made at the meeting of the American Pharmaceutical Association at Detroit was that the revised U. S. P. might be expected early next year.—Western Druggist, 1914, v. 36, p. 371. See also Bull. Pharm. 1914, v. 28, p. 135.

Fleissig: The United States Pharmacopœia is expected to be available for distribution at the end of 1914 or the beginning of 1915.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 253. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 43.

Wilson, R. C.: We are on the eve of a new U. S. P. and N. F. which will in all probability make their appearance within the next few months.—Proc. Georgia Pharm. Assoc. 1914, p. 25.

Diekman, George C.: Concerning the actual date when the U. S. P. IX will be at hand and when its text will become authoritative no definite statement can as yet be made.—Proc. New York Pharm. Assoc. 1914, p. 108.

Vanderkleed, Charles E.: The report of the committee on drug market probably represents the last one based on the U. S. P. VIII.—Drug. Circ. 1914, v. 58, p. 426.

7. DOSES.

Editorial: The practice of specifying doses in the Pharmacopœia has the advantage of providing for the public an additional safeguard against possible error.—Pharm. J. 1914, v. 92, p. 131.

Editorial: Pharmacopœia doses. Official doses are a bugbear and at best are only a guide in treatment.—Prescriber, 1914, v. 8, p. 73–75.

Leptvich, R. W.: On uniformity of doses. The arrangement of doses in the Pharmacopœia is characterized by an utter lack of system.—Proc. Roy. Soc. Med. Therap. & Pharmacol. Sec. 1914, v. 7, p. —.

Hawthorne, C. O.: Some suggested amendments in the manner of stating the doses of medicines in the British Pharmacopœia.—Lancet, 1914, v. 186, p. 231–233. See also Am. Druggist, 1914, v. 62, p. 294, Lancet, 1914, v. 186, p. 357, Pharm. J. 1914, v. 92, p. 131, and Chem. & Drug. 1914, v. 84, p. 184–185.

Editorial: The doses in the Ph. Brit. V are not authoritative, but are merely intended for guidance.—Brit. M. J. 1914, v. 2, p. 635. See also Lancet, 1914, v. 187, p. 907, and Med. Rec. 1914, v. 86, p. 766.

Dreyer and Walker: The dosage of drugs, toxins, and antitoxins.—Proc. Roy. Soc. Med. Therap. & Pharmacol. Sec. 1914, v. 7, p. 51–72. See also Lancet, 1914, v. 186, p. 1023–1027.

Luff, Arthur P.: The thorough knowledge of the doses of drugs is essential to success in the art of prescribing. Learn your doses well.—Brit. M. J. 1914, v. 1, p. 634.

Anon.: A posological table giving the maximum dose for infants, children, and the aged.—Meyer Bros. Drug. 1914, v. 35, p. 47. See also Therap. Gegenw. 1914, v. 55, p. 205–207.

Briggs, C. H.: The two principal methods of giving liquids is by teaspoonfuls and by drops. It is safe to say that one man's conception of a teaspoonful may be twice that of another.—J. Am. Pharm. Assoc. 1914, v. 3, p. 31.

Jürs, Manning H.: The Pharmacopœia should publish the minimum lethal dose of all poisons. The average doses as given at present are of little value to the pharmacist.—Drug. Circ. 1914, v. 58, p. 95–96.

Hatcher and Eggleston: No rule can be formulated for the calculation of the appropriate dose by one mode of administration from the dose by any other mode of administration. Such determination can be made only by experiment.—J. Am. M. Assoc. 1914, v. 63, p. 473.

Peck, E. Saville: A discussion of the course to be adopted when the dose prescribed is apparently excessive, that is above the pharmacopœial maximum.—Year-Book of Pharmacy, 1914, p. 420.

For additional comments on dosage see Zentralbl. Biochem. Biophys.; Zentralbl. exper. Med.; Pharm. J.; and Lancet.

8. ANTIDOTES.

Kreig, Arch.: In the case of poisons, the Pharmacopœia should include mention of the antidotes and how to apply them.—Proc. West Virginia Pharm. Assoc. 1914, p. 78.

Editorial: Many of the labels used by druggists on poisons name antidotal measures which are entirely inadequate and insufficient for the purpose required, while some labels call for remedial measures or the use of means that are absolutely inaccessible to the average person.—Pharm. Era, 1914, v. 47, p. 3.

Anon.: A list of the commonly used poisons with their antidotes.—Meyer Bros. Drug. 1914, v. 35, p. 114.

Lyman, Rufus A.: Toxicological problems of interest to druggists. The treatment of cases of poisoning is a biological rather than a chemical study. Chemical antidotes have probably done more harm than good.—Southern Pharm. J. 1914, v. 6, p. 296–297, 339–340.

Carter, Thomas A.: A new bichloride antidote, a combination of phosphorous acid, acetic acid, and sodium bicarbonate.—Drug. Circ. 1914, v. 58, p. 284.

Editorial: The antagonisms of poisons, with special reference to the work of J. N. Langley.—Med. Rec. 1914, v. 85, p. 1033.

9. WEIGHTS AND MEASURES.

Fischer, Louis A.: Recent developments in weights and measures in the United States.—Pop. Sci. Month. 1914, v. 84, p. 345.

Stratton, S. W.: Report of the proceedings of the Ninth Annual Conference on Weights and Measures of the United States, Department of Commerce, Bureau of Standards, Washington, D. C. See also Am. Food J. 1914, v. 9, p. 262–264.

Editorial: Drug store weights are receiving much notice in the daily press, especially in Massachusetts.—Drug. Circ. 1914, v. 57, p. 603.

Lincoln, Burr B.: A report on the inspection of weights and measures in Michigan.—Rep. Michigan D. & F. Com. 1914, p. 210–215. See also Michigan Weights and Measures Law, p. 206–210, and Albrecht, Fred C.: Rep. Ohio D. & F. Div. 1914 p. 54–61.

Allen, R. M.: An investigation is to be made, among pharmacists, into the weights and measures used in filling prescriptions.—Rep. Kentucky Agric. Exper. Sta. 1911–1913, Lexington, 1914, p. 3.

Downing, F. P.: Druggists' scales and prescriptions glasses, contrary to the general opinion, are quite inaccurate.—Oil, Paint & Drug Rep. 1914, v. 85, June 1, p. 35.

Porter, C. S.: Out of 142 avoirdupois weights tested, only a few varied from the standard, while out of 632 apothecary weights tested, 262 were defective, mostly below standard, though one or two ran a little too high.—Proc. Kentucky Pharm. Assoc. 1914, p. 112.

Floyd, Henry B.: Many pharmacists use the avoirdupois and apothecary's ounces interchangeably without regard to their difference of 42½ grains.—J. Am. Pharm. Assoc. 1914, v. 3, p. 570.

Baillehache, R.: On the definition of a liter and the density of water in the metric system.—Ann. Phys. Paris, 1914, v. 1, p. 314–316.

Alsberg, C. L.: The term "dram."—S. R. A.-Chem. 1914, p. 528. See also Mitchell, A. S.: p. 311.

Brewer, J. Ed.: The Philadelphia branch of the American Pharmaceutical Association believes that the word "dram" should be held to mean one-eighth of an apothecary's (or Troy) ounce and not one-sixteenth of an avoirdupois ounce.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1746.

Arny, H. V.: Report for the committee on weights and measures of the American Pharmaceutical Association.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1274.

Editorial: The metric carat has been accepted by Great Britain, so that now practically every country in the world recognizes 200 mg. as the unit of weight for precious stones.—Drug. Circ. 1914, v. 58, p. 5.

Stratton, S. W.: Units of weights and measures, with definitions and tables of equivalents. Also a résumé of the status of the international metric system in the United States.—Circ. Bur. Stand. No. 47, p. 68.

Siemens, Alexander: The metric system; a review.—Sc. Am. Suppl. 1914, v. 78, p. 6.

Stoll, Max: The weights and measures used in Germany.—Pharm. Ztg. 1914, v. 59, p. 901–902, 918–919.

Richards, William J.: The metric system of weights and measures is gradually gaining in favor and will eventually replace the other systems.—Bull. Pharm. 1914, v. 28, p. 456. See also Comstock, H. M., p. 456–457.

Young, E. F.: It would be a great convenience to working pharmacists if some firm would bring out a set of metric weights to include units for 2, 4, 6, and 8 grams. The usual sets for 1, 2, 5, 10, 20 grams and upward in a decimal scale are not very convenient for many of the quantities we require.—Pharm. J. 1914, v. 93, p. 890.

Mack, Jay: The Ph. Brit. V. and the metric system.—Chem. & Drug. 1914, v. 85, p. 647. See also Gadd, H. Wippell: Pharm. J. 1914, v. 93, p. 494.

Wilbert, M. I.: Metric weights and measures only are used in the Ph. Brit. V. for making or testing official products; the term "mil" is recognized as a short official designation to be used in place of the more cumbersome cubic centimeter.—Am. J. Pharm. 1914, v. 86, p. 559.

Editorial: The term "mil" was first introduced by the late Prof. Oscar Oldberg in his "Unofficial Pharmacopœia," published in 1881.—Am. Druggist, 1914, v. 62, p. 403.

Woods, Chas. D.: The minor errors of preparations are due to poor graduates and scales aggravated by unfamiliarity with the metric system of weights and measures that are used in the official directions.—Off. Insp. Maine Agric. Exper. Sta. 1914, No. 61, p. 103.

Porterfield, W. P.: Although glass manufacturers guarantee their graduates to deliver definite amounts, this is not always true, for there is no graduate made that is capable of delivering equal amounts of all liquids that are measured in the drug store.—Proc. North Dakota Pharm. Assoc. 1914, p. 78.

Anon.: An illustrated description of a new method of marking measuring glasses.—Pharm. Zentralh. 1914, v. 55, p. 183–184.

10. OBJECTS AND USES.

Remington, J. P.: A pharmacopœia can never be an exploiter of new and untried remedies. The Pharmacopœia must be a book of standards.—Am. Druggist, 1914, v. 26, p. 201.

Beal, J. H.: Relations of the United States Pharmacopœia to the law and to the general public.—Am. Druggist, 1914, v. 62, p. 447–449.

Noyes, C. R.: To secure reasonably pure products the best and safest thing for the retail druggist to do is to specify "U. S. P." on every article included in that book.—Proc. Minnesota Pharm. Assoc. 1914, p. 187; also J. Am. Pharm. Assoc. 1914, v. 3, p. 605.

Vanderkleed, Charles E.: It is safe to predict that the U. S. P. IX, with its improvements in descriptions, its more definite though eminently fair and reasonable requirements, and with the largely changed attitude with which it will be received alike by all interests, an even greater conformity to standards will be the result at the end of another decade.—Drug. Circ. 1914, v. 58, p. 426.

Porter, C. S.: Out of 57 stores visited at Mount Sterling, Lexington, and Louisville, 9 were found not to have a copy of the Pharmacopœia, while 31 had metric weights and 35 metric graduates.—Proc. Kentucky Pharm. Assoc. 1914, p. 112.

Floyd, Henry B.: It is safe to say that but one in eight of the drug stores in the District of Columbia can boast of both the U. S. P. and N. F.—Western Druggist, 1914, v. 36, p. 178.

Anon.: Druggists should not be afraid to use the Pharmacopœia. It is the official guide in pharmacy and the more they use it the better they will like it.—N. A. R. D. Notes, 1914, v. 17, p. 1027.

Raubenheimer, Otto: Do not hide your copies of the U. S. P., N. F., dispensatories, and other standard pharmaceutical works, but keep them in a prominent place so you can readily consult them.—Proc. New Jersey Pharm. Assoc. 1914, p. 34.

11. ADDITIONS AND DELETIONS.

Remington, J. P.: The Pharmacopœial Convention disapproved of the admission of patented or proprietary preparations, mainly on the ground that everything in the Pharmacopœia should be free and open to all.—Pract. Drug. 1914, v. 32, p. 333; also J. Am. Pharm. Assoc. 1914, v. 3, p. 865, and Am. Druggist, 1914, v. 62, p. 202.

Raubenheimer, Otto: The new Pharmacopœia will contain a number of synthetic remedies. The revision committee, however, has decided not to introduce such which are still protected by patent rights.—Proc. New York Pharm. Assoc. 1914, p. 172; also Pract. Drug. 1914, v. 32, p. 349.

Editorial: Manufacturers are against the "recognition" of their proprietary products in the U. S. P. on the ground that they would lose control of their composition, and on the further ground that property rights would in a sense be taken away from them.—Bull. Pharm. 1914, v. 28, p. 135.

Rogers, T. B.: Considerable pressure is being brought upon the committee of revision of the Pharmacopœia to the end that they remove useless or inert remedies from its pages.—Am. Vet. Rev. 1914, v. 44, p. 607.

Diekman, George C.: It is expected that the ninth revision of the Pharmacopœia will include only 798 separate and distinct items. Two hundred and twenty-four substances or articles now official have been dropped by the subcommittee on scope, and 64 new substances or articles have been added.—Proc. New York Pharm. Assoc. 1914, p. 108.

Anon.: The deletions from the Ph. Brit. include a stately list of 168 items, 45 of which were formerly in the Indian and Colonial Addendum. The crude drugs number 51, chemicals 17, and galenical preparations 98.—Pharm. J. 1914, v. 93, p. 453. See also Gadd, H. Wippell, p. 494.

12. PURITY AND STRENGTH.

Remington, J. P.: The formulation of a purity rubric for each chemical medicament would be a most important function for a separate international commission.—Compt. rend. Congr. Internat. Pharm. 1913, v. 1, p. 518.

Editorial: The definitions of the U. S. P. should be so worded that there can be but one interpretation of their meaning.—Pacific Pharm. 1914, v. 8, p. 40.

Todd, A. R.: The crying need of the U. S. P. is a clear, concise definition for each preparation, giving a minimum and maximum standard for the principal ingredients and a method for their determination.—Rep. Michigan D. & F. Com. 1914, p. 191.

Havenhill, L. D.: Since the U. S. P. is a legal standard the plea has been made that its language be as free as possible from relative qualifying words of the character of "faint," "slight," "moderate," "about," etc., unless the same be properly defined in an appropriate place.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1301.

Anon.: A table showing the limits of the proportion of lead or of arsenic permissibly present as an impurity in many pharmacopœial substances.—Pharm. J. 1914, v. 93, p. 455.

Hill, C. A.: Pharmaceutical chemical standards, with a table showing the contaminations found in various chemicals and the amount of lead and arsenic found in parts per million, during the years 1910 to 1913, inclusive.—Chem. & Drug. 1914, v. 85, p. 17–23.

Mann, E. W.: The Ph. Brit. V lays down certain minimum standards for crude drugs.—Ann. Rept. Southall Bros. & Barclay, 1914, p. 5.

Anon.: The fixing of definite standards of purity and definite limits of impurity in the Ph. Brit. V is an excellent step, but the manner in which it is set out leaves much to be desired.—Chem. & Drug. 1914, v. 85, p. 609.

Fernau, Albert: In testing chemicals for purity, it is important to determine the nature of the contaminations.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 275.

Vanderkleed, C. E.: Lack of uniformity has resulted because of the absence of cooperative standards among manufacturers.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 127.

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Berl, E.: The unification of standards for volumetric solutions; their production, use, and purity.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 649–654.

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Year.	Total.	Above.	Below.	Per cent above.
Report of—				
1909	395	313	82	79.3
1910	340	291	49	85.6
1911	263	224	39	85.1
1912	298	235	63	78.8
1913	382	264	118	69.1
1914	286	221	65	77.2

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	Alkaloidal solutions.	Metallic solutions.	Solutions of lead and silver salts.	Solutions of calcium salts.	Solutions of magnesium salts.	Solutions of albumen and gelatin.
Alkalies	P	P	P	P	P	
Tannic acid	P	P	P			P
Carbonic acid and carbonates	P	P	P	P	P	
Sulphuric acid and sulphates			P	P		
Phosphoric acid and phosphates	P	P	P	P	P	
Boric acid and borates	P	P	P			
Hydrochloric acid and chlorides			P			
Hydrobromic acid and bromides			P			
Hydriodic acid and iodides			P			
Sulphides		P	P			
Arsenical preparations		P	P			
Albumen		P	P			

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Mossler, G.: Observations on the decomposition of solutions of salts of alkaloids by sterilization.—Bull. sc. pharmacol. 1914, v. 21, p. 205–208; also Pharm. Era, 1914, v. 47, p. 8–9; and Merck's Rep. 1914, v. 23, p. 70–71.

Hofman, J. J.: Table showing the effect of sterilization on various solutions used for subcutaneous injection.—Rev. Internat. Pharm. Brux. 1914, v. 2, p. 20.

Sleeswijk, J. G.: Sterilization by means of ultra-violet rays.—Compt. rend. Congr. Internat. Pharm. 1913, v. 2, p. 1047–1051. See also von Recklinghausen, M.: J. Frankl. Inst. 1914, v. 178, p. 681–704.

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11. FORMS OF ADMINISTRATION.

Hart, Joseph: A water bath is indispensable for the extemporaneous preparation of solutions.—Pacific Drug Rev. 1914, v. 26, March, p. 12.

Brav, Aaron: Drugs used in ophthalmic practice should always be dispensed in a freshly made solution.—Pract. Drug. 1914, v. 32, p. 430.

Peck, E. Saville: Uniformity in the dispensing of abnormal prescriptions. A suggested code of rules.—Chem. & Drug. 1914, v. 85, p. 176–178.

Becker, Henry C.: The saltiness of the alkaline bromides is a distressing feature to overcome. For this purpose a fluid extract of licorice and the aromatic sirup of yerba santa is useful.—Merck's Arch. 1914, v. 16, p. 36.

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Crabbé, Maurice: The relations existing between the chemical structure and therapeutic properties of various substances.—J. pharm. Anvers, 1914, v. 70, p. 161–183.

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AMPOULES.

Hofman, J. J.: The preparation of subcutaneous injections in the form of ampoules, with a table showing the per cent strength of the solutions and the method of sterilizing, the kinds of glass used, the quantities to be dispensed, and the size of the ampoules.—Pharm. Weekblad, 1914, v. 51, p. 117–122; also Rev. Internat. Pharm. Brux. 1914, v. 2, p. 17–20; and Pharm. Post, 1914, v. 47, p. 327–328.

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Kollo, Konstantin: Some further observations on the filling and sterilizing of ampoules.—Südd. Apoth.-Ztg. 1914, v. 54, p. 69–70. See also Anon.: Apoth.-Ztg. 1914, v. 29, p. 879.

Anon.: An ampoule filler for prescription use, illustrated.—Am. Druggist, 1914, v. 62, p. 17.

Lascoff, J. Leon: Camphorated oil in ampoules, simple apparatus for filling, illustrated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 689–691. See also D.-A. Apoth.-Ztb. 1914, v. 35, p. 2–3.

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Peck, E. Saville: When a drug is prescribed in powder form without further specifications, the use of cachets is advocated.—Year-Book of Pharmacy, 1914, p. 422.

Keenan, Thomas J.: An illustrated description of an ingenious powder weighing, folding, and sealing machine.—Pract. Drug. 1914, v. 32, p. 485.

CAPSULES.

Anon.: An illustrated description of machines for making empty gelatin capsules.—Oil, Paint & Drug Rep. 1914, v. 86, October 5, p. 36. See also v. 85, April 13, p. 63, and June 1, p. 35.

Forret, J. A.: An illustrated description of an apparatus for trimming gelatin capsules.—Pharm. J. 1914, v. 92, p. 99–100.

Messinger, M. L.: The increasing use and advantages of the gelatin capsule.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 353–354.

Carrier, Ralph G.: An illustrated description of a method of filling capsules by hand.—Bull. Pharm. 1914, v. 28, p. 204–205. See also Apple, Franklin, M..: J. Am. Pharm. Assoc. 1914, v. 3, p. 1562.

Epplen, W. G.: The addition of a few drops of a high grade of liquid petrolatum to a mixture of drugs or chemicals to be triturated will aid wonderfully.—Bull. Pharm. 1914, v. 28, p. 296.

Grosh, Daniel M.: An illustrated description of an automatic capsule filler.—Bull. Pharm. 1914, v. 28, p. 427.

Blair, H. C.: The filling of soft capsules.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 236–237. See also Moulton, Wm. C.: Bull. Pharm. 1914, v. 28, p. 207.

J. D. Riedel, A. G.: Many of the filled gelatin capsules on the market do not comply with the claims made for them.—Südd. Apoth.-Ztg. 1914, v. 54, p. 189; also Riedel's Berichte, 1914, p. 45–48.

Briggs, C. H.: While capsules themselves do not vary in size, the weight of the contained material usually varies considerably.—J. Am. Pharm. Assoc. 1914, v. 3, p. 31.

Cook, E. F.: Formalized gelatin capsules. Used for medicines which are apt to produce gastric disturbances.—Am. J. Pharm. 1914, v. 86, p. 185–186. See also Ballenger and Elder: J. Am. Pharm. Assoc. 1914, v. 3, p. 736–738; and DeLaney, M. A.: J. Am. M. Assoc. 1914, v. 63, p. 1506, from Military Surgeon, v. 35, October, No. 4.

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Kebler, L. F.: The tablet industry—its evolution and present status—the composition of tablets and methods of analysis.—J. Am. Pharm. Assoc. 1914, v. 3, p. 820–848, 937–958, 1062–1079.

Jones, H. W.: The assay of certain medicinal tablets, including tablets containing salicylates and tablets containing alkaloids.—Am. Druggist, 1914, v. 62, p. 369–370.

Lieungh, Frode: The making of compressed tablets. An introduction to the general subject.—Norges Apotek. Tidsskr. 1914, v. 22, p. 143–146, 235–255.

Grosh, Daniel M.: Tablet making 25 years ago and the rapid spread of the tablet industry.—Pharm. Era, 1914, v. 47, p. 410; also Bull. Pharm. 1914, v. 28, p. 426, and Montreal Pharm. J. 1914, v. 25, p. 200–203.

Markus, F.: An illustrated description of an automatic compressing device for tablets.—Pharm. Post, 1914, v. 47, p. 486. See also Apoth.-Ztg. 1914, v. 29, p. 310–311; and Pharm. Zentralh. 1914, v. 55, p. 166.

Fantus, Bernard: The making of tablets by the retail druggist, with directions for granulating the necessary material.—J. Am. Pharm. Assoc. 1914, v. 3, p. 72–75.

Anon.: A number of formulas for preparing simple and complex compressed tablets.—Vrtljschr. prakt. Pharm. 1914, v. 11, p. 159–164.

E'we and Vanderkleed: Compression of tablets.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 277.

Lundin, P. E.: A suggestion to use starch to facilitate the disintegration of tablets. A mixture of arrowroot and wheat starch is recommended.—Pharm. Ztg. 1914, v. 59, p. 548–549.

Fantus, Bernard: Compressed tablets made with cacao butter are satisfactory for extemporaneous preparation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 662.

Smith, F. A. Upshur: The suggestion to use oil of theobroma in the production of granulations for making compressed tablets was presented by Edmund White as early as 1902.—J. Am. Pharm. Assoc. 1914, v. 3, p. 887.

Briggs, C. H.: The variation in weight of compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 31–33.

Rehm, R.: Commercial tablets leave much to be desired. Many of them are compressed too hard. Others are not uniform in weight.—Pharm. Ztg. 1914, v. 59, p. 362–363. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 398.

Fantus, Bernard: Tabellæ dulces, sweet tablets for children's medication.—J. Am. Pharm. Assoc. 1914, v. 3, p. 656–660.

Searle, C. H.: Tablets containing oils frequently have formulas that are ridiculous.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 181. See also Windolph, J. Fred, p. 221.

SUPPOSITORIES.

Mittelbach, Wm.: The U. S. P. process for making suppositories is to be improved. The cacao butter mixture is to be divided and pressed into proper form by means of the old suppository mold.—Proc. Missouri Pharm. Assoc. 1914, p. 107.

Wulff and Hillen: An illustrated description of a bougie mold.—Pharm. Post, 1914, v. 47, p. 343.

Fürst, Solomon: A method for making tannic acid and belladonna suppositories.—Pharm. J. 1914, v. 92, p. 125.

Lansens, J.: Ovules of tannin with directions for making the gelatin base.—Ann. Pharm. Louvain, 1914, v. 20, p. 1–2.

TABLET TRITURATES.

Todd, A. R.: It is impossible to include in the U. S. P. or N. F. every available triturate and one of these books might include a general provision reading somewhat like the following: "All tablet triturates shall contain that quantity of medicinal substance which is represented on the container thereof."—Rep. Michigan D. & F. Com. 1914, p. 191.

Grosh, Daniel M.: An illustrated description of an automatic tablet triturate and hypodermic tablet machine.—Bull. Pharm. 1914, v. 28, p. 425. See also Pract. Drug. 1914, v. 32, p. 88.

12. METHODS OF ADMINISTRATION.

Luff, Arthur P.: The art of prescribing; a review.—Brit. M. J. 1914, v. 1, p. 633–635. See also Editorial, p. 668–669.

Hatcher and Eggleston: Studies on the absorption of drugs.—J. Am. M. Assoc. 1914, v. 63, p. 469–473; also Tr. Am. Assoc. Sec. Pharm. & Therap. 1914, p. 24–36.

Anderson, John F.: Some unhealthy tendencies in therapeutics. The parenteral administration of medicines appears to have cast a spell not only over the laity, but also on some physicians.—J. Am. M. Assoc. 1914, v. 63, p. 1–3; also Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 17–23.

Editorial: The craze for hypodermic medication in Italy. A review of an article by Ferreri.—Lancet, 1914, v. 186, p. 626.

Lesure, André: Suspensions in oil, of simple substances (metallic or nonmetallic), for intramuscular injection.—J. pharm, et chim. 1914, v. 9, p. 537–542.

Bunch, J. L.: Some continental methods of treating syphilis. The methods of administering mercury.—Practitioner, 1914, v. 92, p. 255–260.

Pratt, J. P.: Description of an apparatus for intratracheal insufflation. Illustrated.—J. Am. M. Assoc. 1914, v. 62, p. 37.

Arndt, H.: An illustrated description of a combination atomizer and inhaler.—Pharm. Zentralh. 1914, v. 55, p. 112.

Hess, Alfred F.: The mouth drip; a method of administering fluid to infants in gastroenteritis (alimentary intoxication); illustrated.—J. Am. M. Assoc. 1914, v. 62, p. 452.

Bürgi, E.: Observations on the actions of mixtures of medicines.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 411–412. See also abstract J. Am. M. Assoc. 1914, v. 62, p. 1590.

Pöhlmann, A.: A contribution on idiosyncrasy to drugs.—Münch. med. Wchnschr. 1914, v. 61, p. 543–544.

Rice, Philip: Drug proving methods of the future; a review.—Am. J. Inst. Homœop. 1914, v. 6, p. 1133–1136. See also Wherry, C. A., p. 617–621.

Smith, Alden E.: Homœopaths must look at the action of drugs from two viewpoints, the physiological and the dynamic.—J. Am. Inst. Homœop. 1914, v. 6, p. 889.

II. INTERNATIONAL STANDARDS.

I. THE EVOLUTION OF UNIFORMITY IN PHARMACOPŒIAL STANDARDS FOR POTENT MEDICAMENTS.

1. STANDARDS AND TESTS.

Tschirch, A.: International activities in the field of pharmacy, with suggestions for further development of international standards.—Schweiz.-Apoth.-Ztg. 1914, v. 52, p. 45–49.

Remington, J. P.: The world-wide movement for unification of pharmacopœial standards is a large proposition and involves the requirement that certain widely used products should be of the same purity and quality and comply with the same tests of purity and identity in all parts of the world.—Proc. N. A. M. M. P. 1914, p. 35; also J. Am. Pharm. Assoc. 1914, v. 3, p. 863; Am. Druggist, 1914, v. 62, p. 201; and Pract. Drug. 1914, v. 32, p. 332.

Bruntz and Trimbach: A review of the proceedings of the Eleventh International Congress of Pharmacy.—Bull. sc. pharmacol. 1914, v. 21, p. 77ff.

Mouliets, L.: A review of the proceedings of the international congress at the Hague.—Bull. Pharm. soc. Bordeaux, 1914, v. 54, p. 41–47.

Herissey, M. H. W.: The need for fixing standards for internationally recognized potent medicaments for which no such standard now exists.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 1, p. 470–473.

Bührer, C.: The unification of the demands for purity of chemical products.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 643–645.

van der Haar, A. W.: Codification of the purity requirements for chemical products.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 646–648.

Berl, E.: The unification of standards for volumetric solutions, their production, use, and purity.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 649–654.

Hercod, E.: Proposition for adoption of an international method for titrating pepsin.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 790–791.

Remington, J. P.: An international pharmacopœial bureau.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 1, p. 514–518.

Wilbert, M. I.: Pharmacopœial titles for new remedies. A compilation showing the titles included in several of the foreign pharmacopœias.—J. Am. Pharm. Assoc. 1914, v. 3, p. 652–655.

Dichgans, H.: A comparative examination of the pharmacopœial methods of assay for active drugs and their preparations. An experimental basis for international uniformity.—Apoth.-Ztg. 1914, v. 29, p. 283, 293, 306, 319, 330, 342, 356, 368, 378, 391, 403, 414, 441, 462, 487, 498, 516, 519.

2. ADOPTION OF BRUSSELS CONFERENCE PROTOCOL.

Anon.: A detailed report of the proceedings of the International Conference for the Unification of Formula of Active Medicaments held in Brussels September 15–20, 1902.—Rev. Internat. pharm. Brux. 1914, v. 2, p. 73, 81, 101, 117, 129, 149, 161, 178, 193.

Editorial: The adoption of the international agreement by the Ph. Brit. V has necessitated certain changes in the preparation, composition, and strength of important galenical compounds containing potent ingredients, with the object of providing uniformity in the pharmacopœial usage of the different countries.—Pharm. J. 1914, v. 93, p. 447. See also Brit. M. J. 1914, v. 2, p. 635; Chem. & Drug. 1914, v. 85, p. 480; and Am. Druggist, 1914, v. 62, p. 403.

Wilbert, M. I.: The provisions of the Brussels Conference Protocol have generally been followed in the new Ph. Brit. V, special attention being directed to the exceptions made. The proposed international drop counter is recognized, the dropping device being described.—Am. J. Pharm. 1914, v. 86, p. 559.

Anon.: A table in the Ph. Brit. V sets out in detail the deviations from the international agreement respecting the unification of the pharmaceutical formulas for potent drugs which was signed at Brussels on November 26, 1906.—Chem. & Drug. 1914, v. 85, p. 486.

Editorial: The Ph. Norv. IV embodies the requirements of the Brussels Conference in tabular form and articles corresponding to those that have been included in the Pharmacopœia are designated by the addition of the letters "P. I." to the subtitle.—Bull. Pharm. 1914, v. 28, p. 136.

3. DROPS AND DROPPERS.

Heebner, Chas. F.: In the Ph. Brit. V descriptions of analytical processes the term "drop" is often used, and hence an official medicine dropper has been adopted, in accordance with the international agreement, having its delivery end 3 millimeters in external diameter and adapted to deliver 20 drops of distilled water to the gram (milliliter) at 15.5°. It should be noted that all the temperatures mentioned throughout the book are degrees centigrade, though there is no reference to the fact.—Canadian Pharm. J. 1914, v. 48, p. 206. See also Anon.: Chem. & Drug. 1914, v. 85, p. 484.

Anon.: An illustrated description of a dropper device and container for eyewash.—Pharm. Post, 1914, v. 47, p. 258. See also Apoth.-Ztg. 1914, v. 29, p. 756; and Pharm. Zentralh. 1914, v. 55, p. 301.

Anon.: An illustrated description of a dropping bottle with a locking device for the stopper.—Pharm. Zentralh. 1914, v. 55, p. 259. See also Am. Druggist, 1914, v. 62, p. 57.

Anon.: A review of several recent articles on the value of drop tables and the use of the international standard dropper.—Pharm. Zentralh. 1914, v. 55, p. 374.

Wright, Eugene: The measurement of the refractive index of a drop of liquid.—J. Washington Acad. 1914, v. 4, p. 269–279.

Vaillant, P.: On the law of Tate and the variation in the size of drops under the influence of the rate of flow.—Compt. rend Acad. sc. 1914, v. 158, p. 936–938.

2. FOREIGN PHARMACOPŒIAS.

1. BRITISH.

The British Pharmacopœia, 1914, published under the direction of the General Council of Medical Education and Registration of the United Kingdom, is the fifth edition of this book. It contains a total of XXXI and 602 pages and officializes 817 drugs and preparations. The monographs, descriptions, and formulas occupy 452 pages, the several appendices 92 pages, and the index 47 pages. The official articles include a total of 171 vegetable drugs, 14 animal drugs, 206 chemical drugs, and 426 galenical preparations. The additions in the 1914 pharmacopœia number 43 and the deletions 168.

The book was formally adopted by the executive committee of the General Medical Council on July 13, 1914, was placed on exhibition for review in London on October 1, and was available through the book trade on December 31 of the same year.

Among the novel features of the Ph. Brit. V is a list of abbreviated Latin names of official drugs and preparations adopted in the index of the British Pharmacopœia. This list is presented separately in the form of an appendix and the abbreviations given are intended to comply with the abbreviations to be included in the forthcoming edition of the Pharmacopœia of the United States.

The metric system of weights and measures has been employed for all pharmaceutical and analytical computations. As a transitional provision, doses are also expressed in terms of the imperial system. The term "mil" is recognized as a short official designation for the milliliter, "decimil" for the tenth part of a milliliter, and "centimil" for the one-hundredth part of a milliliter.

In accordance with the international agreement of 1906, a dropper having an external diameter of exactly 3 millimeters is to be employed when drops are directed to be used in the several analytical processes.

The tests for identity and purity have been much elaborated, the physical and chemical constants being described at some length. In connection with the volatile oils the optical rotation is usually given and in connection with fats and the fatty oils the saponification number and the iodine number are generally specified. The number of assay processes for botanical drugs, galenical preparations, and volatile oils has been increased considerably, and the book now includes 13 assays for crude drugs, of which 7 are for alkaloids, 25 assays for galenical preparations, and 11 for volatile oils.

This pharmacopœia also indicates a limit to the proportion of lead or of arsenic permissibly present as an impurity in many pharmacopœial substances. These limits are noted in the text, and general methods for determining the contaminations are included among the appendices. The same practice has been adopted with respect to many of the other methods for detecting chemical and physical constants. General processes are included for iodine value and unsaponifiable matter in fixed oils or fats and the determination of esters and of alcohols in volatile oils. This pharmacopœia also describes official methods for the determination of melting points, boiling points, refractive indices, optical rotation, and specific gravity.

The provisions of the International Conference respecting the unification of the formulas for potent drugs and preparations have been generally adhered to. A table showing the deviations from the recommendations of the international agreement of September, 1906, has been introduced with the introductory paragraphs of the book. The British practice of measuring liquids by volume and solids by weight has been maintained throughout, being thought more convenient both to the prescriber and the dispenser than the continental practice of weighing liquids as well as solids.

Of the crude drugs official in the pharmacopœia of 1908, or in the Indian and Colonial Addendum, no fewer than 51 have been deleted and of the galenical preparations 98 have been omitted. These include 3 aceta, 3 decocta, 7 emplastra, 6 extracta and 9 extracta liquida, 8 infusa, and 16 liquores concentrati.

Of the 43 articles added to the Ph. Brit. V, 3 are crude drugs, 25 are chemicals, 11 are galenical preparations, and 1 is a fat.

The new British Pharmacopœia has been liberally discussed by the medical as well as the pharmaceutical press of that country. Considerable space has been devoted in the several journals to the changes which have occurred in the revision. Lists are given of the additions and omissions.

Gadd, H. Wippell: Some first impressions of the Ph. Brit. V. Even a cursory glance through the pages of the new pharmacopœia has a chilling effect.—Pharm. J. 1914, v. 93, p. 494.

Editorial: The British Pharmacopœia, 1914. When judged as an imperial as distinguished from a national pharmacopœia the new work does not appear to merit any unfavorable criticism. The needs of different parts of the Empire appear to have been met in a reasonable manner, but this matter can not perhaps be altogether accurately judged from the point of view of medicine in the mother country alone, and experience will show whether further modifications and additions may be necessary to make the book truly fulfill its world-wide functions.—Brit. M. J. 1914, v. 2, p. 884–885.

Editorial: The new pharmacopœia. An abstract of an article published in the London Times.—Chem. & Drug. 1914, v. 84, p. 871–872.

Anon.: Notes on the history of the British Pharmacopœia, and portraits of the members of the General Medical Council committee.—Chem. & Drug. 1914, v. 85, p. 140–142.

Anon.: The British Pharmacopœia, 1914, from the pharmaceutical point of view.—Lancet, 1914, v. 187, p. 907–908.

Editorial: Discussion of the publication of the new British Pharmacopœia by the General Medical Council.—Pharm. J. 1914, v. 93, p. 418.

Anon.: The chemistry of the British Pharmacopœia, 1914.—Pharm. J. 1914, v. 93, p. 495, 520, 554, 585, 617, 664, 669, 729.

Anon.: A review of the galenical preparations of the British Pharmacopœia, with formulas and processes.—Pharm. J. 1914, v. 93, p. 492, 522, 555, 586.

Anon.: The formulas of the Ph. Brit. V in equivalent imperial weights and measures.—Pharm. J. 1914, v. 93, p. 760–761, 806–807, 840–841, 874–875.

Additional comments on the Ph. Brit. V will be found in Brit. M. J. 1914, v. 2, p. 634–635, 672–673, 719–721, 758–760, 797–798; Lancet, 1914, v. 187, p. 901–902; Prescriber, 1914, v. 8, p. 295–297; Practitioner, 1914, v. 93, p. 853–855; Chem. & Drug. 1914, v. 85, p. 483ff; Pharm. J. 1914, v. 93, p. 452–455; Brit. & Col. Drug. 1914, v. 66, p. 245–250, 300–302; New York M. J. 1914, v. 100, p. 829; Am. Druggist, 1914, v. 62, p. 403–404, 432; Drug. Circ. 1914, v. 57, p. 690; Am. J. Pharm. 1914, v. 86, p. 559–562; Merck's Rep. 1914, v. 23, p. 284; Pharm. Era, 1914, v. 47, p. 513; Midl. Drug. 1914, v. 48, p. 524; Canadian Pharm. J. 1914, v. 48, p. 203–206; Canadian Drug. 1914, v. 26, p. 634; Chem. & Drug. Australas. 1914, v. 24, p. 416–417.

429–430; Pharm. Weekblad, 1914, v. 51, p. 1282–1283; Schweiz. Apoth.-Ztg. 1914, v. 52, p. 703–705; Pharm. Post, 1914, v. 47, p. 800–801; Apoth.-Ztg. 1914, v. 29, p. 859.

BRITISH PHARMACEUTICAL CODEX.

Editorial Note: B. P. Codex revision is to be taken in hand with a view to the production, in due course, of a further issue of the work, but this must not be held to imply that there is any immediate need of a new codex.—Pharm. J. 1914, v. 92, p. 781.

Editorial: The British Pharmaceutical Codex is a supplementary standard in New South Wales and Tasmania, and "Squire's Companion" in western Australia.—Chem. & Drug. Australas. 1914, v. 29, p. 238.

News Note: The codex is not adopted as a supplementary standard in New Zealand.—Chem. & Drug. Australas. 1914, v. 29, p. 104.

"Karshish": The codex is the nearest approach we have at present to the suggested national health insurance pharmacopœia and it could well be adapted for the purpose.—Pharm. J. 1914, v. 93, p. 11.

Anon.: The hope is expressed that the British Pharmaceutical Codex may be printed on India paper in a compact form, so that every panel doctor may be able to carry a copy in his pocket.—Pharm. J. 1914, v. 92, p. 318.

Editorial: It is evident that there is a demand for local formularies. It is to be regretted that such a small modicum of care and skill has sometimes been utilized in their preparation.—Pharm. J. 1914, v. 93, p. 550.

Watters, Henry: An appeal to the druggists of Canada for suggestions for the improvement of Canadian Formulary.—Canadian Pharm. J. 1914, v. 48, p. 197–198. See also Editorial, p. 194.

2. FINNISH.

Lundin, P. E.: A review of the new Finnish Pharmacopœia. This book is published both in Swedish and Finnish and succeeds the fourth edition of the Finnish Pharmacopœia which was published in 1885. It includes xli+349 pages; 162 new articles have been included and 137 of the formerly official articles deleted. The titles are in Latin and the subtitles and synonyms are given both in Swedish and Finnish.—Pharm. Ztg. 1914, v. 59, p. 833–834.

3. NORWEGIAN.

Rustang, Gullow: A review of the Norwegian Pharmacopœias in use before 1914.—Norges Apotek. Tidsskr. 1914, v. 22, p. 160–166.

Andresen, S.: A review of the Ph. Norv. IV with the tests and requirements including the pharmacognosy, chemistry, and galenical preparations of the pharmacopœia.—Apoth.-Ztg. 1914, v. 29, p. 772–773.

Editorial: The new pharmacopœia is in Norwegian, the titles being in Latin. In many respects the new edition resembles the German Pharmacopœia and it has been brought thoroughly up to date by including definite standards of purity, or of content of active principles.—Pract. Drug. 1914, v. 32, p. 34. See also Anon.: Südd. Apoth.-Ztg. 1914, v. 54, p. 78.

Editorial: In accordance with an existing agreement the Latin nomenclature of the Norwegian Pharmacopœia is in accord with that of the other Scandinavian countries, Sweden and Denmark, and is quite distinct from that of other European countries.—Bull. Pharm. 1914, v. 28, p. 136.

Anon.: A number of formulas from the Ph. Nov. IV are reprinted.—Pharm. Zentralh. 1914, v. 55, p. 322–323.

Johnsen, G.: Further comment on preparations of the Norwegian Pharmacopœia.—Norges Apotek. Tidsskr. 1914, v. 22, p. 8–12.

4. GERMAN.

Bohrisch, P.: Suggestions for improving the monographs included in the Ph. Germ. V.—Pharm. Zentralh. 1914, v. 55, p. 891, 908, 921; also Apoth.-Ztg. 1914, v. 29, p. 901–902.

Rupp, E.: The Ph. Germ. V methods for testing official preparations.—Apoth.-Ztg. 1914, v. 29, p. 722–724.

Lefeldt, M.: Suggestions for additions and amendments to the Ph. Germ. V.—Pharm. Ztg. 1914, v. 59, p. 42–43.

Freund, Hans: A contribution on the valuation of official Ph. Germ. V tinctures.—Pharm. Zentralh. 1914, v. 55, p. 261–268.

Linke, H.: Observations on the examination of official products.—Apoth.-Ztg. 1914, v. 29, p. 673–674, 683–685, 694–695.

Steinhorst, H.: The testing of official Ph. Germ. V extracts for heavy metals and the need for avoiding containers of tin and iron.—Apoth.-Ztg. 1914, v. 29, p. 39.

Feist, K.: Suggestions for improving the tests for pharmaceutical specialties.—Apoth.-Ztg. 1914, v. 29, p. 604–606.

Matute and Bascunana: The requirements of the Spanish, German, Austrian, Belgian, British, United States, French, Swiss, and Italian Pharmacopœias.—Farm. Españ. 1914, v. 46, p. 742–746. See also Nigrisoli, Vittorio: Boll. chim.-farm. 1914, v. 53, p. 401–419.

Anon.: A compilation of abstracts of articles referring to the Ph. Germ. V.—Pharm. Zentralh. 1914, v. 55, p. 536ff.

A book review calls attention to a new volume entitled "The Ph. Germ. V, Chemical and Physiological Methods of Testing," by Herzog and Hanner.—Pharm. Zentralh. 1914, v. 55, p. 211–212.

5. RUSSIAN.

Anon.: The Russian and British Pharmacopœias compared. Presentation of a table giving the titles of identical preparations, a second table showing preparations differing in strength, and a third table showing preparations differing slightly in strength and method of preparation.—Chem. & Drug. 1914, v. 84, p. 164–166.

6. ITALIAN.

News Note: In August the committee was appointed which is to have charge of the revision of the Italian Pharmacopœia.—J. Am. M. Assoc. 1914, v. 63, p. 2300.

Nigrisoli, Vittorio: A note on the official Italian Pharmacopœia and suggestions for its revision. A number of the official articles are discussed in detail. The article also contains a table showing the comparative requirements for active substances in the Italian, Austrian, Belgian, French, German, and Swiss Pharmacopœias and a table showing the maximum dose of a number of active medicaments in the same authorities.—Boll. chim.-farm. 1914, v. 53, p. 401–419.

7. FRENCH.

Natute and Bascunana: Comparative study of the requirements of the Spanish Pharmacopœia, with a table showing the requirements of the Spanish, German, Austrian, Belgian, British, United States, French, Swiss, and Italian Pharmacopœias.—Farm. Españ. 1914, v. 46, p. 742–746. See also Nigrisoli, Vittorio: Boll. chim.-farm. 1914, v. 53, p. 401–419.

8. SWISS.

Nigrisoli, Vittorio: A table showing the comparative requirements for active substances in the Italian, Austrian, Belgian, French, German, and Swiss Pharmacopœias and a table showing the maximum dose of a number of active medicaments in the same authorities.—Boll. chim.-farm. 1914, v. 53, p. 401–419. See also Natute and Bascunana: Farm. Españ. 1914, v. 46, p. 742–746.

9. AUSTRIAN.

Helch, Hans: Propositions for the revision of the Austrian Pharmacopœia. A compilation of suggestions and criticisms.—Pharm. Post, 1914, v. 47, p. 571–573, 579–582.

Stébra-Böhm, Johann: Suggestions as to the necessary changes and additions to be included in the forthcoming Austrian Pharmacopœia.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 299.

Fernau, Albert: A compilation of suggestions for use in connection with the revision of the Austrian Pharmacopœia.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227, 241, 254, 263, 275.

Nigrisoli, Vittorio: The requirements for active substances in the Italian, Austrian, Belgian, French, German, and Swiss Pharmacopœias.—Boll. chim.-farm. 1914, v. 53, p. 401–419. See also Natute and Bascunana: Farm, Españ. 1914, v. 46, p. 742–746.

Fernau, Albert: The Ph. Austr. VIII still contains a number of faults and shortcomings that should be eliminated in the coming revision.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 275.

News Note: Report of a proposed organization of an independent pharmacopœial commission to assist in the revision of the Austrian Pharmacopœia.—Pharm. Presse, 1914, v. 19, p. 226. See also Pharm. Post, 1914, v. 47, p. 462–463.

Stébra-Böhm, Johann: For practical reasons the publications of the Austrian Pharmacopœia in the Latin text should be discontinued and the pharmacopœia printed in the several languages now in use in the Empire.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 299.

10. JAPANESE.

Anon.: Some further alterations in the Japanese Pharmacopœia proclaimed by the home minister in ordinance. For previous revisions of the monographs see C. & D. March 2, 1912, and April 5, 1913.—Chem. & Drug. 1914, v. 84, p. 167.

11. BELGIAN.

Anon.: An enumeration of the Belgian pharmacopœias of the seventeenth century.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 161–162.

Natute and Bascunana: Comparative study of the requirements of the Spanish, German, Austrian, Belgian, British, United States, French, Swiss, and Italian Pharmacopœias.—Farm. Españ. 1914, v. 46, p. 742–746. See also Nigrisoli, Vittorio: Boll. chim.-farm. 1914, v. 53, p. 401–419.

12. DUTCH.

The second supplement to the Ph. Ndl. IV was issued under date of May 29, and like the pharmacopœia itself is available in both a Latin and a Dutch edition. The pamphlet of 25 and V printed pages is printed on one side of the sheet and includes monographs for 12 articles, 2 silver salts (colloidal silver and silver proteinate), 2 glycerophosphates (calcium and sodium), 1 morphine derivative (dionin), 2 synthetic local anesthetics (novocaine and tropacocaine hydrochloride), bismuth oxy-iodo-gallate or airol, desiccated thyroid gland, adonis vernalis herb, oil of chaulmoogra, and zinc paste.

Several aditional reagents are also included and the monographs for 23 official articles are corrected so as to bring the requirements up to date. The maximum single and daily doses for the several active drugs are given in the index as is the solubility of the several chemical substances. Desiccated thyroid gland is required to contain 0.4 per cent of iodine when assayed by the method outlined.

Schamelhout, A.: The second supplement to the fourth edition of the Ph. Ndl. A review of the several articles that have been included.—Rev. Internat. Pharm. Brux. 1914, v. 2, p. 21–24. See also Suyver, J. F.: Pharm. Weekblad, 1914, v. 51, p. 72–86.

Anon.: A review of the second supplement to the Ph. Ndl. IV.—Pharm. Post, 1914, v. 47, p. 125–126. See also Anon.: Chem. & Drug. 1914, v. 84, p. 124.

A book review calls attention to a supplement to the fourth edition of the Netherlands Pharmocopœia, published by the Rotterdam Department of the Netherlands Association for the Advancement of Pharmacy.—Pharm. Weekblad, 1914, v. 51, p. 233–238. See also p. 129, Pharm. Zentralh. 1914, v. 55, p. 256; and Am. Perf. 1914, v. 9, p. 159.

Anon.: A number of formulas from the new supplement to the Dutch Pharmacopœia published by the Rotterdam Department of the Nederlandsche Maatschappij ter Bevordering der Pharmacie.—Chem. & Drug. 1914, v. 85, p. 143–144; also Pract. Drug. 1914, v. 32, p. 395.

13. SPANISH.

Matute and Bascunana: Comparative study of the requirements of the Spanish Pharmocopœia, with a table showing the requirements of the Spanish, German, Austrian, Belgian, British, United States, French, Swiss, and Italian Pharmacopœias.—Farm. Espan. 1914, v. 46, p. 742–746.

14. ARGENTINE.

Macmillan, H. J.: The first official edition of the Argentine Pharmacopœia was published in November, 1898, having been compiled by a committee of eight doctors appointed by the national board of health. Many formulas of the French Codex were bodily transferred. There occur among other preparations, 15 abstracts, 6 epithems, 87 fluid extracts, 7 infusions, and 46 tinctures.—Chem. & Drug. 1914, v. 84, p. 166–167.

15. SPANISH EDITION OF THE U. S. P. VIII.

Anon.: Article 31 of the regulations for the practice of pharmacy in the Republic of Cuba provides that the Spanish edition of the Pharmacopœia of the United States is to be the standard for drugs and medicines.—Farm. Españ. 1914, v. 46, p. 68.

III. COMMENTS ON OFFICIAL ARTICLES.

ACACIA.

U. S. P. IX: Specifies other African species of acacia. The drug to be almost completely soluble in twice its weight of water. Not more than 1 per cent to be insoluble.—J. Am. Pharm. Assoc. 1914, v. 3, p. 359, and Abstr. Prop. Changes, Part 2, 1914, p. 1.

Linke, H.: The Ph. Germ. V. permits a maximum of 5 per cent of ash. The commercial drug was found to contain only from 2.2 to 2.8 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 567.

Grimme, Clemens: A contribution to our knowledge of the gums of commerce, with observations on the comparative value of the several methods of testing.—Pharm. Zentralh. 1914, v. 55, p. 237–246. See also Alland: Bull. sc. pharmacol. 1914, v. 21, p. 477–487.

Jensen, H. R.: One sample of acacia, closely simulating in appearance the hard Senegal variety, was found to be spurious, being evidently a pale sample of the semisoluble Bassora type.—Evans' An. Notes, 1914, p. 5.

Baker, W. L.: Gum Senegal was found to contain too large an amount of wood.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

Maines, E. L.: Acacia was found to contain from 1.73 to 2.82 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Mann, E. W.: The ash yield for 9 samples of the entire gum acacia of various grades ranged from 2.05 to 2.61 per cent. For 18 samples of the powder, the corresponding figures were 1.84 to 3.41 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 5.

U. S. P. IX: Mucilage of acacia to be made by dissolving 350 gm. of acaccia in distilled water to make 1,000 gm.—J. Am. Pharm. Assoc. 1914, v. 3, p. 551, and Abstr. Prop. Changes, Part 3, 1914, p. 28.

Kordon, Frido: Suggestion to prepare mucilage of acacia by circulatory displacement.—Pharm. Post, 1914, v. 47, p. 318.

Williams, Ed. E.: In the manufacture of mucilage of acacia, the directions should read: "Invert bottle occasionally till solution is effected," as this dissolves the gum as quickly as constant agitation.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

U. S. P. IX: The sirup is to be heated at boiling temperature for 15 minutes, the volume restored with boiling water, and the product preserved in sterilized bottles, closed with sterilized stoppers and capped.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1575–1576, and Abstr. Prop. Changes, Part 6, 1914, p. 13–14.

ACETANILIDUM.

Williams, Joseph H.: The manufacture of acetanilide.—Pharm. J. 1914, v. 93, p. 293. See also Haeussermann: J. Pharm. Elsass-Lothr. 1914, v. 41, p. 167–168; and Anon.: Southern Pharm. J. 1914, v. 7, p. 60.

Linke, H.: Acetanilide is more readily soluble in chloroform than in ether, the relations being 1:8 of chloroform and 1:50 of ether.—Apoth.-Ztg. 1914, v. 29, p. 489.

Stockinger, O.: Ten lots of acetanilide examined had melting points ranging from 113° to 114.5° (U. S. P. 113°), boiling points ranging from 293° to 295° (U. S. P. 299°), and answered all other U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 127.

Mirkin, A.: On the determination of acetanilide.—Am. J. Pharm. 1914, v. 86, p. 354.

Emery, W. O.: The estimation of acetanilide and phenacetin in admixture. Outline of the method with report of some experimental results.—J. Ind. & Eng. Chem. 1914, v. 6, p. 665–669.

E'we and Vanderkleed: Volatility of caffeine and of acetanilide in a current of steam. From 2.4 to 3 per cent of the acetanilide was recovered from the distillate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1683.

Fernau, Albert: The indophenol test should be deleted as acetphenetidin gives practically the same color reaction. The bromine test is applicable to acetanilide, but not to acetphenetidin.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Kebler, L. F.: Outline of method for the determination of acetanilide in compressed tablets and in tablets containing acetanilide mixtures.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1078.

Department of Agriculture: Reports that 5 gr. acetanilide tablets were found to contain but 4.36 gr. of acetanilide.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1286.

Kaiser, W. F.: Suggestion to include in the compound acetanilide powder 10 parts of ammonium carbonate in place of a corresponding amount of acetanilide.—Proc. Wisconsin Pharm. Assoc. 1914, p. 71.

Lyman, Rufus A.: Caffeine is being used with the idea of antagonizing the toxic effect of acetanilide upon the heart muscle.—Southern Pharm. J. 1914, v. 6, p. 339.

Stevenson, B. A.: From a number of experiments it would seem that acetanilide derivatives are at times eliminated in mother's milk.—J. Am. M. Assoc. 1914, v. 62, p. 1434–1435.

ACETONUM.

E'we, G. E.: Two samples of acetone examined, had specific gravities of 0.852 and 0.819 (U. S. P. O. 790), and contained excessive amounts of empyreumatic substances, but were otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 128.

Denigès and Simonot: The rapid determination of acetone by the chronometric method.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 11–19.

Cervello and Girgenti: The qualitative and quantitative determination of acetone, with observations on physiological acetonuria and the influence of various drugs on hunger acetonuria.—Arch. exper. Path. u. Pharmakol. 1914, v. 76, p. 118–124.

Frankforter and Cohen: Equilibria in the systems, water, acetone and inorganic salts.—J. Am. Chem. Soc. 1914, v. 36, p. 1103–1134.

Klein, Fred: Acetone and its reducing properties toward selenious acid.—Pract. Drug. 1914, v. 32, p. 538.

Hagglund, Erik: A method for the quantitative separation of acetaldehyde and acetone.—Ztschr. Anal. Chem, 1914, v. 53, p. 433–439.

Vogt, E.: The treatment of inoperable carcinoma of the uterus with acetone.—Therap. Monatsh. 1914, v. 28, p. 123–125.

For additional references on acetone see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; and J. Am. M. Assoc.

ACETPHENETIDUM.

Williams, Joseph H.: The manufacture of phenacetin.—Pharm. J. 1914, v. 93, p. 294. See also Chem. & Drug. 1914, v. 85, p. 390; and Southern Pharm. J. 1914, v. 7, p. 61.

Wilbert, M. I.: Phenacetinum is recognized as a title for acetphenetidinum in all of the European pharmacopœias.—J. Am. Pharm. Assoc, 1914, v. 3, p. 654.

Emery, W. O.: Estimation of acetanilide and phenacetin in admixture. Outline of the method, with report of some experimental results.—J. Ind. & Eng. Chem. 1914, v. 6, p. 665–669.

Kebler, L. F.: Outline of method for the determination of acetphenetidin in compressed tablets and in compound tablets containing acetphenetidin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1084.

ACIDUM ACETICUM.

Klason, Peter: An attempt at a theory of the dry distillation of wood.—J. Prakt. Chem. 1914, v. 90, p. 413–447.

Anon.: Manufacture of acetic acid. English Patent 10377, April 27, 1914.—J. Soc. Chem. Ind. 1914, v. 33, p. 961. See also French, E. H., p. 961; and Behrens, J., p. 807.

Bertrand and Sazerac: Observations on the favorable action exercised by manganese on acetic fermentation.—Bull. sc. pharmacol. 1914, v. 21, p. 321–324.

Fernau, Albert: For concentrated acetic acid, tests for formic acid and sulphurous acid should be included in the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Orrick, W. H.: Twelve lots of acetic acid tested 35.9 to 37.3 per cent absolute acetic acid.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 127.

Roberts, J. G.: Of four samples of acetic acid of various grades examined, one, which was supposed to be 36 per cent acetic acid, contained only 0.64 per cent absolute acetic acid.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 127.

Brown, L. A.: Two samples of dilute acetic acid analyzed; one passed and one adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 117.

Yanagisawa, H.: The utilization of the higher fatty acids occurring in the manufacture of acetic acid and sodium acetate from calcium pyrolignate.—J. Pharm. Soc. Japan, 1914, January, p. 1.

For additional references on acetic acid see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.

ACIDUM ACETICUM DILUTUM.

Ziefle, Adolph: Of 71 samples of diluted acetic acid examined, 36 were not within 10 per cent of official strength.—Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 155–156.

ACIDUM ACETICUM GLACIALE.

Mann, E. W.: We have experienced considerable difficulty in obtaining supplies of glacial acetic acid of sufficiently high melting point. The maximum figure observed was 16.58°, but the majority of samples examined melted between 13° and 14.5°.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 42.

E'we, G. E.: Of 12 lots of glacial acetic acid examined, only 1 tested less than the required 99 per cent, this sample testing 98.7 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 128.

Hill, C. A.: Of 123 samples of glacial acetic acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 4 parts per million. None of the samples contained arsenic.—Chem. & Drug. 1914, v. 85, p. 20.

ACID, ACETYLSALICYLIC.

Gehe & Co.: The consumption of acetylsalicylic acid is steadily increasing.—Handelsbericht, 1914, p. 121.

Williams, Joseph H.: Acid acetylsalicylic, known also under the trade name "aspirin," is prepared by acting on salicylic acid with either acetyl chloride or acetic anhydride and recrystallizing from alcohol.—Pharm. J. 1914, v. 93, p. 293. See also Chem. & Drug. 1914, v. 85, p. 313; and Southern Pharm. J. 1914, v. 7, p. 58.

Gerngross and Kast: Preparing salts of acetylsalicylic acid. English Patent 18,743, Aug. 18, 1913.—J. Soc. Chem. Ind. 1914, v. 33, p. 613.

Bruun, H.: Aspirin and acetylsalicylic acid.—Norges Apotek. Tidskr. 1914, v. 22, p. 107. See also Størmer, G., p. 128, and Anon., p. 336.

Remington, J. P.: The Pharmacopœia will probably include aspirin, if the manufacturer will sign a contract to relieve the pharmacopœial commission from the results of lawsuits.—Proc. West Virginia Pharm. Assoc. 1914, p. 89.

Anon: Acidum acetylsalicylicum, a new addition to the Ph. Brit. V. Brand names for this are aspirin, salacetin, saletin, and xaxa.—Chem. & Drug. 1914, v. 85, p. 486. See also Pharm. J. 1914, v. 93, p. 346.

Lefeldt, M.: The Ph. Germ. V requirement that acetylsalicylic acid be odorless is too stringent. A faint odor of acetic acid is usually present.—Pharm. Ztg. 1914, v. 59, p. 42.

Anon.: The Japanese Pharmacopœia now gives the melting point of acetylsalicylic acid as about 135°.—Chem. & Drug. 1914, v. 84, p. 167.

E'we and Vanderkleed: Aspirin can not be put through the processes necessary in making compressed tablets without slight decomposition resulting in the liberation of salicylic acid. Examination of 13 commercial samples of 5-grain tablets showed ratios of free salicylic acid to aspirin ranging from 1:136 to 1:1568.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 276.

News Item: Nine samples of aspirin examined by the division of foods and drugs of the New Jersey State Board of Health were all below standard.—J. Am. M. Assoc. 1914, v. 62, p. 859.

Lythgoe, Hermann C.: Five samples of 5-grain aspirin tablets were obtained and examined. They were found to contain from 4.16 to 5 grains per tablet. The melting point of the aspirin obtained was found to vary from 124.5° to 129.5°; the melting point of pure aspirin is 135°.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 407.

Table showing some of the analytical results reported for aspirin tablets.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, L. A.	22	12	Proc. Kentucky Pharm. Assoc. 1914, p. 116.
Congdon, Leon A.	16	12	Rep. Kansas Bd. Health, 1914, p. 100.
Sayre, L. E.	4	3	Bull. Kansas Bd. Health, 1914, v. 10, p. 178.
Strode, Sylvanus E.	2	1	Rep. Ohio D. & F. Div., 1914, p. 118.
Todd, A. R.	11	4	Bull. Michigan D. & F. Dept., 1914, January-February, p. 17.
Todd, A. R.	24	4	Rep. Michigan D. & F. Com. 1914, p. 176.

Anon.: Hexamethylenamine (urotropine) and acetylsalicylic acid (aspirin) are chemically incompatible in solution, the hexamethylenamine decomposing to yield ammonia and formaldehyde.—J. Am. M. Assoc. 1914, v. 63, p. 1971.

Anon.: Antipyrine and aspirin should not be mixed together. The acetic ester will be split off and keep the powder moist.—Am. Druggist, 1914, v. 62, p. 93.

Scoville, W. L.: The incompatibility of quinine sulphate and aspirin is probably due to the fact that quinine is changed by organic acids into an isomeric poisonous body known as quinotoxin.—Bull. Pharm. 1914, v. 28, p. 527.

Gerngross and Kersasp: Observations on the salts of acetylsalicylic acid.—Am. Chem. 1914, v. 406, p. 241-260.

Anon.: Properties of salts of acetylsalicylic acid, particularly the acetylsalicylates of sodium, potassium, lithium, magnesium, calcium, zinc, and mercury.—Südd. Apoth.-Ztg. 1914, v. 54, p. 624.

van Itallie and Olivier: The chemistry of calcium acetylsalicylate.—Pharm. Weekblad, 1914, v. 51, p. 1361-1366. See also Apoth.-Ztg. 1914, v. 29, p. 939.

Reed, Edward N.: Report of a case of idiosyncrasy to aspirin (acetylsalicylic acid) in which vomiting, cyanosis, and edema followed the ingestion of 5 grains of the drug. No treatment was instituted, and in about six hours the patient was comfortable.—J. Am. M. Assoc. 1914, v. 62, p. 773. See also p. 797.

For additional reference on acetylsalicylic acid see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.

ACIDUM BENZOICUM.

Williams, Joseph H.: The manufacture of benzoic acid.—Pharm. J. 1914, v. 93, p. 293. See also Southern Pharm. J. 1914, v. 7, p. 60.

Wende, E.: A simple method for the determination of halogens in benzoic acid.—Apoth.-Ztg. 1914, v. 29, p. 157.

Rupp, E.: The Ph. Germ. method for testing benzoic acid is time consuming and unsatisfactory. A modified halogen test is outlined.—Südd. Apoth.-Ztg. 1914, v. 54, p. 302; also Apoth.-Ztg. 1914, v. 29, p. 723.

Blanksma, J. J.: Observations on some halogen derivatives of benzoic acid.—Chem. Weekblad, 1914, v. 11, p. 59-61.

Serger, H.: A review of some of the recent literature relating to the use of benzoic acid as a chemical preservative.—Chem.-Ztg. 1914, v. 38, p. 245-246.

For additional comments on benzoic acid see Zentralbl. Biochem. Biophys.; Chem. Abstr.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.

ACIDUM BORICUM.

Burger, A.: U. S. Patent 1,108,120. Boric acid. Boric acid is produced by calcining a borate and heating the resulting products with carbon dioxide in the presence of water.—J. Ind. & Eng. Chem. 1914, v. 6, p. 1050; also J. Soc. Chem. Ind. 1914, v. 33, p. 1008.

Dhar, Nilratan: Observations on several complex acids of boron.—Ztschr. anorg. Chem. 1914, v. 86, p. 196–200.

Ewe, G. E.: One lot of boric acid examined was below the U. S. P. requirement of 99.8 per cent, testing 99.4 per cent, and contained a slight excess of magnesium and sulphates, but was U. S. P. in other respects.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 131.

Mann, E. W.: For 30 samples of boric acid, 3 parts per million was the highest figure recorded for arsenic, the majority being practically free from this impurity.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 44.

Hill, C. A.: Of 1,524 samples of boric acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 60 parts per million. The arsenic content varied from 0 to 40 parts per million.—Chem. & Drug. 1914, v. 85, p. 19.

Firth and Myers: Some properties of solutions of the boric acids in alcohol. A modified boiling point apparatus.—Proc. Chem. Soc. 1914, v. 30, p. 293.

Faber, Theodore: The determination of boric acid in ointments.—Pharm. Ztg. 1914, v. 59, p. 163–164. See also Enz, Karl, p. 313.

Bertrand and Agulhon: A method for the determination of minute quantities of boric acid in organic matter.—Bull. sc. pharmacol. 1914, v. 21, p. 65–68; also Ann. Falsif. 1914, v. 7, p. 67–69, 119–121.

Bertrand and Agulhon: The rapid determination of boric acid occurring naturally and introduced in food materials.—Compt. rend. Acad. sc. 1914, v. 158, p. 201–204; also Bull. Soc. chim. France, 1914, v. 15, p. 292–295, and Bull. sc. pharmacol. 1914, v. 21, p. 68–71.

Jay: A method for the determination of boric acid in foods.—Compt. rend. Acad. sc. 1914, v. 158, p. 357–358.

Harris, H. L.: A contribution on the use of food preservatives. Borax and boric acid are permitted in England and Australia, but not in the United States.—Am. Med. 1914, v. 20, p. 68. See also Serger, H.: Chem.-Ztg. 1914, v. 38, p. 244–245.

ACIDUM CITRICUM.

U. S. P. IX: Melting point omitted. Tests for oxalic acid, tartaric acid and lead added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1563, and Abstr. Prop. Changes, Part 6, 1914, p. 1.

Häussler, E. P.: A new color reaction for citric acid.—Chem.-Ztg. 1914, v. 38, p. 937; also Südd. Apoth.-Ztg. 1914, v. 54, p. 514.

Fernau, Albert: The Ph. Austr. VIII test for tartaric acid in citric acid might be elaborated on.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Roberts, J. G.: One sample of citric acid examined was found to be grossly adulterated, as it was composed largely of tartaric acid.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

E'we, G. E.: One lot of citric acid examined assayed 99.9 per cent U. S. P. citric acid, contained 8.13 per cent water of crystallization, melted when anhydrous, at 150° (U. S. P. 152° to 153°), and answered all other U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1914, v. 134.

Mann, E. W.: The good record we have lately reported for citric acid has been marred by the occurrence of a sample containing no less than 75 parts per million of lead. In 45 other samples, the amount of lead found did not exceed 9 parts per million, and the maximum figure for arsenic was 2 parts per million. Ash in no case exceeded 0.06 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 44.

Hill, C. A.: Of 257 samples of citric acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 20 parts per million. The arsenic content varied from 0 to 1 part per million.—Chem. & Drug. 1914, v. 85, p. 20.

Kebler, L. F.: Outline of method for the determination of citric acid in compound tablets containing acetanilide.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1082.

ACID, DIETHYLBARBITURIC.

Williams, Joseph H.: Malourea is also known under the trade name of veronal, and is produced by the condensation of ethyl diethylmalonate with urea.—Pharm. J. 1914, v. 93, p. 293. See also Chem. & Drug. 1914, v. 85, p. 487; and Southern Pharm. J. 1914, v. 7, p. 60.

Heebner, Chas. F.: In Barbitone, the pharmacist will find diethyl barbituric acid, otherwise designated as veronal.—Canadian Pharm. J. 1914, v. 48, p. 204. See also Am. Druggist, 1914, v. 62, p. 404.

Jensen, H. R.: The one sample of malourea examined melted at 186°.—Evans' An. Notes, 1914, p. 44.

Kebler, L. F.: Outline of method for the determination of veronal in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1099.

Lucas, H.: A chemical study of and some new tests for veronal.—Pharm. J. 1914, v. 94, p. 424.

Biltz, Heinrich: Salts of barbituric acid and their derivatives.—Ann Chem. 1914, v. 404, p. 186–199.

Venturoli, Guiseppe: A case of veronal poisoning, and a report of experiments on the quantitive determination of veronal in the animal body.—Apoth.-Ztg. 1914, v. 29, p. 250.

Munro, J. M. H.: Veronal poisoning. Case of recovery from 125 grains, with detailed summary of pulse and temperature observations in the form of a table.—Brit. M. J. 1914, v. 1, p. 854–856. See also Souper, H. R., p. 1015.

Russell and Parker: Fatal case of veronal poisoning, with report of the chemical procedures employed in the search for veronal.—Brit. M. J. 1914, v. 1, p. 853–854.

Fraser, Margaret H.: Note on two cases of veronal poisoning. Veronal in large doses will cause necrosis of the kidney cells. It is possible that repeated small doses may also affect the renal epithelium.—Lancet, 1914, v. 186, p. 1736–1737.

Glaser, T.: A summary from the literature of nine cases of chronic veronal poisoning, with the addition of a tenth case to the list.—(Wiener klin. Wchnschr. v. 27, Oct. 29, No. 44.) J. Am. M. Assoc. 1914, v. 63, p. 2168.

von der Porten, Ernst: The treatment of delirium tremens with veronal.—Münch. med. Wchnschr. 1914, v. 61, p. 1179. See also Schneider, Kurt, p. 1343.

Anderson, W. K.: In the treatment of a case of morphinomania, veronal in 10 grain doses gave the patient most satisfaction.—Practitioner, 1914, v. 92, p. 441.

Editorial: It seems to be unquestionably a fact that some persons develop a tolerance to veronal, but this tolerance is never as great as with morphine or cocaine.—Therap. Gaz. 1914, v. 38, p. 100.

Anon.: Suggestion to combine veronal with emetic doses of ipecac to avoid the ingestion of toxic quantities.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 477.

For additional cases of veronal poisoning see Brit. M. J.; Pharm. J.; Index Med.

ACID, FORMIC.

Haber, Fritz: The manufacture of formic and oxalic acids.—J. Ind. & Eng. Chem. 1914, v. 6, p. 328.

Bredig and Carter: The catalytic synthesis of formic acid under pressure.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 541–545.

Chattaway, F. D.: Interaction of glycerol and oxalic acid.—J. Chem. Soc. Lond. 1914, v. 105, p. 151–156.

Hottenroth, Valentine: The determination of formic acid.—Chem.-Ztg. 1914, v. 38, p. 598.

Serger, H.: Review of some of the recent literature relating to the use of formic acid as a chemical preservative.—Chem.-Ztg. 1914, v. 38, p. 210–211.

Ewins, A. J.: The mutual solubility of formic acid and benzene, and the system, benzene-formic acid-water.—J. Chem. Soc. Lond. 1914, v. 105, p. 350–364.

For additional references on formic acid see Chem. Abstr.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.; Chem. Zentralbl.

ACIDUM GALLICUM.

Schwenk, Erw.: A contribution on gallic acid; the production of intermediate products.—J. Prakt. Chem. 1914, v. 90, p. 53–60.

Roberts, J. G.: Of the three samples of gallic acid examined, one sample yielded 0.072 per cent of residue upon ignition. One sample of technical quality yielded 0.51 per cent of residue upon ignition.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 139.

ACIDUM GLYCEROPHOSPHORICUM.

Dubois, Gaston: The chemistry and properties of glycerophosphates (glycerinophosphates).—J. Ind. & Eng. Chem. 1914, v. 6, p. 122–128.

King and Pyman: The constitution of the glycerylphosphates. The synthesis of alpha and beta-glycerylphosphates.—J. Chem. Soc. Lond. 1914, v. 105, p. 1238–1259.

Umney and Bennett: The composition of the glycerophosphates of commerce.—Pharm. J. 1914, v. 92, p. 134–135; also Chem. & Drug. 1914, v. 85, p. 165–166.

François and Boismenu: The determination of glycerophasphates in granules.—Ann. Falsif. 1914, v. 7, p. 423–432; also J. pharm. et chim. 1914, v. 10, p. 5–14, 51–57.

ACIDUM HYDRIODICUM DILUTUM.

U. S. P. IX: Rubric to read not less than 9.5 per cent nor more than 10.5 per cent. Test for chloride added. Residue changed to 3 per cent on evaporation and ignition at low red heat.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Jensen, H. R.: A sample of hydriodic acid with specific gravity 1.1225, prepared by the action of H_2S on iodine and water, was found by Volhard's silver method to contain 15 per cent HI (which figure was known to be correct), whereas with N/I NaOH (methyl orange), a strength of 20 per cent was indicated. This discrepancy of total and haloid acidity may have been due to some complex sulphur acid.—Evans' An. Notes, 1914, p. 37.

Strachan and Chu: The transference number, conductance, and ionization of hydriodic acid at 25°.—J. Am. Chem. Soc. 1914, v. 36, p. 810–819.

ACIDUM HYDROBROMICUM DILUTUM.

U. S. P. IX: Rubric to read not less than 9.5 nor more than 10.5 per cent. Residue on evaporation not more than 0.0025 gm. from 25 cc. Method of assay added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Hill, C. A.: Of 42 samples of diluted hydrobromic acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 12 parts per million. The arsenic content varied from 0 to 5 parts per million.—Chem. & Drug. 1914, v. 85, p. 20.

ACIDUM HYDROCHLORICUM.

U. S. P. IX: Rubric to read not less than 31 per cent nor more than 33 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Nield, J. H.: Process of producing hydrochloric acid. U. S. Patent 1,102,539, July 7, 1914.—J. Soc. Chem. Ind. 1914, v. 33, p. 864. See also p. 255.

Reusch, K.: A review of recent literature relating to the manufacture of sulphates and of hydrochloric acid.—Chem.-Ztg. 1914, v. 38, p. 463–464.

Orrick, W. H.: Four of the eight samples of hydrochloric acid examined were a trifle lower than the U. S. P. standard of 31.9 per cent HC1. These four samples ranged from 31.3 to 31.7 per cent. The other four samples ranged from 32.1 to 32.5 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 140.

Roberts, J. G.: The hydrochloric acid content of the samples examined ranged from 36.8 to 37.54 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 140.

Tarbell, R. F.: The determination of arsenic in hydrochloric and sulphuric acids.—J. Ind. & Eng. Chem. 1914, v. 6, p. 400–401. See also Koelsch, H.: Chem.-Ztg. 1914, v. 38, p. 5–6.

Jensen, H. R.: Thirty-four samples of pure acid, with specific gravity 1.16 to 1.17, examined in the last three years, have all contained arsenic only to the extent of 1 part per million or less.—Evans' An. Notes, 1914, p. 37.

Hill, C. A.: Of 60 samples of hydrochloric acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 5 parts per million. The arsenic content varied from 0 to 1 part per million.—Chem. & Drug. 1914, v. 85, p. 20.

Andrews, Launcelot W.: A method for the precise standardization of hydrochloric acid solutions.—J. Am. Chem. Soc. 1914, v. 36, p. 2089–2091; also Chem. News, 1914, v. 110, p. 94–95.

For additional references on hydrochloric acid see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.

ACIDUM HYDROCHLORICUM DILUTUM.

U. S. P. IX: Rubric to read not less than 9.5 per cent nor more than 10.5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Lynch, L. R.: In connection with the examination of diluted hydrochloric acid, inquiry disclosed the fact that some druggists were not aware of the strength of the concentrated acid used, and in most instances measures were used instead of weights.—Rep. District of Columbia Health Off. 1913, Washington, 1914, p. 94.

Table showing some of the analytical results reported for diluted hydrochloric acid.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, L. A.	5	3	Proc. Kentucky Pharm. Assoc. 1914, p. 117.
Frary, Guy G.	16	12	Rep. South Dakota F. & D. Div., 1914, p. 227, 262.
Lynch, R. L.	50	24	Rep. District of Columbia Health Off., 1913, Washington, 1914, p. 90.
Ziefle, Adolph	84	59	Rep. North Dakota Agric. Exper. Sta., 1912, p. 154–155.

ACIDUM HYDROCYANICUM DILUTUM.

Lundell and Bridgman: A new method for the determination of hydrocyanic acid and the alkali cyanides.—J. Ind. & Eng. Chem. 1914, v. 6, p. 554–556; also Chem. News, 1914, v. 110, p. 158–160.

Stockinger, R.: One lot assayed 2.09 per cent and was otherwise strictly U. S. P. Ten other lots ranged from 2.12 to 2.58 per cent, absolute HCN.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 140.

Wester, D. H.: Observations on the hydrocyanic acid content of folia laurocerasi.—Pharm. Weekblad, 1914, v. 51, p. 207–208.

Collins and Blair: The rate of liberation of hydrocyanic acid from linseed.—Analyst, 1914, v. 39, p. 70–74.

Sargeant and Edwards: Hydrocyanic acid gas and its uses in horticulture.—Pharm. J. 1914, v. 92, p. 193–194.

ACIDUM HYPOPHOSPHOROSUM.

U. S. P. IX: Rubric to read not less than 30 per cent nor more than 32 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, part 6, 1914, p. 2.

E'we, G. E.: Three samples of 30 per cent hypophosphorous acid examined ranged from 30.4 to 30.7 per cent absolute hypophosphorous acid, but one sample contained 1.42 per cent of calcium calculated as calcium hypophosphite.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 141.

Wycokff, E. E.: The manufacture and assay of hypophosphorous acid.—J. Am. Pharm. Assoc. 1914, v. 3, p. 182–185.

Jensen, H. R.: One sample of hypophosphorous acid was rejected owing to the presence of a decided trace of calcium, probably as phosphate. This was precipitated by ammonia.—Evans's An. Notes, 1914, p. 38.

ACIDUM HYPOPHOSPHOROSUM DILUTUM.

U. S. P. IX: Rubric to read not less than 9.5 per cent nor more than 10.5 per cent. Test for arsenic modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 9, 1914, p. 2.

E'we, G. E.: Six samples of diluted hypophosphorous acid ranged from 10.8 to 11.6 per cent.—Proc. Pennsylvania Pharm. 1914, p. 141.

ACIDUM LACTICUM.

Oppenheimer, Max: Experimental observations on the formation of lactic acid in alcoholic fermentation.—Ztschr. physiol. Chem. 1914, v. 89, p. 45–62. See also v. 93, p. 262–269.

Freudenberg, Karl: On the configuration of glycerinic acid and of lactic acid.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 2027–2037.

Fernau, Albert: A test for glycerin, by extracting the zinc salt with absolute alcohol, might be included in the Ph. Austr. for lactic acid.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Roberts, J. G.: The U. S. P. method for the determination of the strength of lactic acid is likely to give misleading results, due to the fact that the U. S. P. directs that the titration be conducted at boiling temperature, without giving the length of time during which it should be boiled.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 144.

E'we, G. E.: All 22 lots of lactic acid examined ranged between 87.3 and 92.1 per cent lactic acid, by modified method, which included the anhydride present.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 144.

Hill, C. A.: Of 18 samples of lactic acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 12 parts per million. The arsenic content varied from 0 to 0.8 parts per million.—Chem. & Drug. 1914, v. 85, p. 20.

Serger, H.: Review of some of the recent literature relating to the use of lactic acid as a chemical preservative.—Chem.-Ztg. 1914, v. 38, p. 211.

ACIDUM NITRICUM.

U. S. P. IX: Rubric to read not less than 67 per cent nor more than 69 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Haber, Fritz: The fixation of nitrogen and process for oxidation of nitrogen.—J. Ind. & Eng. Chem. 1914, v. 6, p. 328–330.

Tiede and Domcke: A contribution on the properties of active nitrogen.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 420–425.

Koenig and Elöd: Contribution on the question of nitrogen oxidation by electrical discharges, and the activating of nitrogen and of oxygen in a continuous electrical current.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 523–529.

Baker and Strutt: Observations on the active modification of nitrogen.—Ber. deutsch. Chem. Gesellsch. 1914, v. 47, p. 801–804, 1049–1055.

Wagner, T. B.: Synthetic production of nitric acid.—J. Ind. & Eng. Chem. 1914, v. 6, p. 75. See also Anon.: Pharm. Zentralh. 1914, v. 55, p. 5.

Reusch, K.: A review of recent literature relating to the manufacture of nitric acid.—Chem.-Ztg. 1914, v. 38, p. 464.

Grosh, Daniel M.: Popular review of the progress made in the fixation of nitrogen.—Merck's Rep. 1914, v. 23, p. 272–273.

Jones, G. Cecil: Utilization of atmospheric nitrogen; a review.—Chem. Tr. J. 1914, v. 54, p. 60–62.

For patents relating to the manufacture of nitric acid see J. Soc. Chem. Ind. 1914, v. 33, p. 200, 201, 311, 353, 421, 482, 549.

Busvold, N.: The determination of nitrogen in Norwegian saltpeter.—Chem.-Ztg. 1914, v. 38, p. 799–800.

E'we, G. E.: Of eight lots of nitric acid examined, only one tested below the required 68 per cent. This lot tested 65.6, while the others ranged from 68 to 69.1 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Hill, C. A.: Of 34 samples of nitric acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 6 parts per million. The arsenic content varied from 0 to 1.2 parts per million.—Chem. & Drug. 1914, v. 85, p. 20.

Moore, J. Walker: Nitric acid and carbolic acid are the best caustic solutions for use in the treatment of chancroids.—Merck's Arch. 1914, v. 16, p. 78.

ACIDUM OLEICUM.

Twitchell, E.: The melting and solidifying points of mixtures of fatty acids and the use of these points to determine the composition of such mixtures.—J. Ind. & Eng. Chem. 1914, v. 6, p. 564–569.

Fachini and Dorta: A contribution to our knowledge of the fatty acids and the detection of arachinic acid.—Chem.-Ztg. 1914, v. 38, p. 18.

Meigen and Winogradoff: The action of halogens on oleic acid and the determination of the iodine number of fats.—Ztschr. ang. Chem. 1914, v. 27, p. 241–244.

Baker, W. L.: Congealing point of oleic acid was found to be 14°, which is high. Notable quantities of palmitic and stearic acids were present.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

E'we, G. E.: Of three lots of oleic acid examined, two were considered satisfactory, while one had a slight excess of palmitic and stearic acids, and a specific gravity of 0.890.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 152.

Roberts, J. G.: A distinct improvement has been noticed in the quality of oleic acid. Every one of the seven samples examined complied with all the requirements of the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 152.

Canzoneri and Bianchini: The rancidity of olive oil and the oxidation of oleic acid in presence of light.—Ann. chim. applicata, 1914, v. 1, p. 24–32.

Shaw, T. W. A.: The catalytic reduction of oleic acid and cottonseed oil by means of hydrogen in presence of finely divided nickel.—J. Soc. Chem. Ind. 1914, v. 33, p. 771–774.

For additional comments on fatty acids see Zentralbl. Biochem. Biophys.; Chem. Zentralbl.; Chem. Abstr.

ACIDUM PHOSPHORICUM.

U. S. P. IX: Rubric to read not less than 85 per cent nor more than 88 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Brunschwig, F.: Process of manufacturing phosphoric acid. U. S. Patent 1,083,429, Jan. 6, 1914.—J. Soc. Chem. Ind. 1914, v. 33, p. 200. See also Haff, M. M., p. 255.

Fox, Paul J.: Alcohol in the manufacture of phosphoric acid and phosphates.—J. Ind. & Eng. Chem. 1914, v. 6, p. 828–829.

E'we, G. E.: Of five lots of phosphoric acid examined, one tested 84.6 per cent instead of the required 85 per cent. The others ranged from 85.3 to 86.2 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 154.

Hill, C. A.: Of 167 samples of phosphoric acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 8 parts per million. The arsenic content varied from 0 to 1.2 parts per million.—Chem. & Drug. 1914, v. 85, p. 20.

ACIDUM PHOSPHORICUM DILUTUM.

U. S. P. IX: Rubric to read not less than 9.5 per cent nor more than 10.5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Brown, L. A.: Three samples of diluted phosphoric acid examined; two passed and one adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 120.

ACID, PICRIC.

Kühl, Hugo: On the detection of picric acid.—Pharm. Zentralh. 1914, v. 55, p. 523–524.

Marden and Elliott: The solubility of picric acid between water and several immiscible solvents needs further investigation.—J. Ind. & Eng. Chem. 1914, v. 6, p. 633.

Anon.: Explosion of picric acid due to ignition in a works. Thought to have been an explosion of picric acid dust due to the presence of some foreign substance.—Chem. Tr. J. 1914, v. 55, p. 542.

Wilson, W. T.: Report of 35 cases in which the eruption of pellagra was treated with picric acid gauze combined with administration of picric acid internally.—J. Am. M. Assoc. 1914, v. 63, p. 1599.

Wilcox, Herbert B.: Picric acid as an aid in the treatment of various skin lesions.—Merck's Arch. 1914, v. 16, p. 150–152.

Isnard, E.: The detection of picric acid in urine.—Ann. chim. analyt. 1914, v. 19, p. 100–101; also Répert. pharm. 1914, v. 26, p. 193–194.

ACIDUM SALICYLICUM.

Williams, Joseph H.: The manufacture of salicylic acid.—Pharm. J. 1914, v. 93, p. 293. See also Chem. & Drug. 1914, v. 85, p. 313; and Southern Pharm. J. 1914, v. 7, p. 58.

Kahn, Joseph: Salicylic acid and its derivatives. A review of the chemistry of the several products and their use in the treatment of rheumatism.—Proc. New York Pharm. Assoc. 1914, p. 155–166.

Fernau, Albert: A solution of 1 part salicylic acid in 6 parts of concentrated sulphuric acid is never colorless, always slightly yellowish.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Hill, C. A.: Of 12 samples of salicylic acid examined during the years 1911 to 1913, inclusive, the lead content varied from 0 to 2 parts per million. The arsenic content varied from 0.2 to 0.8 parts per million.—Chem. & Drug. 1914, v. 85, p. 20.

Anon.: The difference in price between synthetic and natural salicylic acid seems to be the only important difference.—Meyer Bros. Drug. 1914, v. 35, p. 327. See also Blumenschein: J. Am. Pharm. Assoc. 1914, v. 3, p. 607.

Hanzlik, Paul J.: The salicylates; a historical and critical review of the literature.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 131–189.

Serger, H.: A review of some of the recent literature relating to the use of salicylic acid as a chemical preservative.—Chem.-Ztg. 1914, v. 38, p. 244–245.

Kochmann, M.: The objectionable characteristics of salicylic acid and of the soluble salicylates include taste, gastric irritation, auditory disturbances, renal irritation, and excessive perspiration.—Therap. Monatsh. 1914, v. 28, p. 652.

Baldoni, Alessandro: The transformation of salicylic acid in the animal organism.—Arch. farmacol. sper. 1914, v. 17, p. 241–247. See also v. 18, p. 151–177.

Miller, Joseph L.: The specific action of salicylates in acute articular rheumatism, with a table showing the period of time that patients remained in the hospital with and without salicylate.—J. Am. M. Assoc. 1914, v. 63, p. 1107–1109; also Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 213–222.

Weinbrenner: The treatment of epithelioma of the skin with salicylic acid.—Münch. med. Wchnschr. 1914, v. 61, p. 127–129.

For additional comments on salicylic acid see Zentralbl. Biochem. Biophys.; Zentralbl. exper. Med.; Chem. Zentralbl.; Chem. Abstr.; J. Chem. Soc. Lond.

ACIDUM STEARICUM.

Jäger, A.: Progress in the stearin industry; a review.—Seifensieder Ztg. 1914, v. 41, p. 729.

Twitchell, E.: The melting and solidifying points of mixtures of fatty acids and the use of these points to determine the composition of such mixtures.—J. Ind. & Eng. Chem. 1914, v. 6, p. 564–569.

Mayer, Joseph L.: The melting point of six samples of stearic acid was found to vary from 55 to 58°.—Proc. New York Pharm. Assoc. 1914, p. 115.

Jensen, H. R.: Two especially pure samples of the commercial stearic acid were scarcely entitled to such a description. The figures show a 60 per cent content of palmitic acid, with a trace of oleic acid.—Evans' An. Notes, 1914, p. 66.

Koenig, Alfred E.: On the stearates and palmitates of the heavy metals, with remarks concerning instantaneous precipitations in insulating solutions.—J. Am. Chem. Soc. 1914, v. 36, p. 951–961.

Berg and Angerhausen: The separation of stearin from fats by means of digitonin.—Chem.-Ztg. 1914, v. 38, p. 978–979.

Matthes and Rath: On the separation of dioxy and of tetroxy stearic acid.—Arch. Pharm. 1914, v. 252, p. 699–703.

Kremann and Kropsch: A contribution to the knowledge of natural fats from the standpoint of phase rule.—Monatsh. Chem. 1914, v. 35, p. 561–580, 823–839, 841–857.

ACIDUM SULPHURICUM.

U. S. P. IX: Rubric to read not less than 93 per cent nor more than 95 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Wagner, T. B.: The contact process for sulphuric acid and its use in connection with the discharge of sulphuric acid fumes from smelters.—J. Ind. & Eng. Chem. 1914, v. 6, p. 73; also Oil, Paint & Drug Rep. 1914, v. 85, February 2, p. 36.

Schlieps, Georg: A modification in the sulphuric acid tower system.—Chem.-Ztg. 1914, v. 38, p. 966.

Hempel, Walter: The chamber process for sulphuric acid. The determination of nitrous oxide in the chamber gases.—Ztschr. ang. Chem. 1914, v. 27, p. 218–223. See also Wentzki, O., p. 312 and p. 512.

Mason, William: An illustrated description of an accessory apparatus for Glover and Gay-Pussac towers.—Chem.-Ztg. 1914, v. 38, p. 800–801.

For patents relating to the manufacture of sulphuric acid see J. Soc. Chem. Ind. 1914, v. 33, p. 135, 200, 201, 234, 311, 482, 483, 485, 539, 692, 864, 865, 919, 961, 1008.

Reusch, K.: A review of the literature of 1913 relating to the manufacture of sulphuric acid.—Chem.-Ztg. 1914, v. 38, p. 385, 415, 441. See also p. 1241–1243.

Uhlmann, P. W.: Norwegian and Spanish pyrites as crude material in the manufacture of sulphuric acid.—Chem.-Ztg. 1914, v. 38, p. 59–60. See also p. 597–598.

Grosh, Daniel M.: A future source and process for manufacturing sulphuric acid. An adaption or modification of the contact or catalyzing process.—Merck's Rep. 1914, v. 23, p. 92–93.

Grégoire, Ach.: The preparation of sulphuric acid free from nitrous compounds.—Bull. Soc. Chim. Belg. 1914, v. 28, p. 23–33.

Tarbell, R. F.: The determination of arsenic in hydrochloric and sulphuric acid.—J. Ind. & Eng. Chem. 1914, v. 6, p. 400–401. See also Koelsch, H.: Chem.-Ztg. 1914, v. 38, p. 5–6.

Nissenson, H.: The determination of arsenic, iron, and mercury in sulphuric acid.—Chem.-Ztg. 1914, v. 38, p. 1097.

Hill, C. A.: Of 22 samples of sulphuric acid examined during the years 1910 to 1913, inclusive, the lead content varied from 2 to 60 parts per million. The arsenic content varied from 0 to 1.5 parts per million.—Chem. & Drug. 1914, v. 85, p. 20.

Schmidt, Ernst: The detection of minute quantities of selenic acid in sulphuric acid.—Arch. Pharm. 1914, v. 252, p. 161–165.

Gazter and Glover: The resistance of platinum vessels to hot sulphuric acid.—Ztschr. anorg. Chem. 1914, v. 87, p. 353–356.

For additional references on sulphuric acid see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.

ACIDUM SULPHURICUM AROMATICUM.

Brown, L. A.: Three samples of aromatic sulphuric acid analyzed. All found to be deficient in sulphuric acid, the strength running from 89.8 to 83.4 per cent of the U. S. P. standard.—Proc. Kentucky Pharm. Assoc. 1914, p. 117.

Ziefle, Adolph: Of 74 samples of aromatic sulphuric acid examined, 35 were not within 10 per cent of official strength.—Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 152–153.

ACIDUM SULPHURICUM DILUTUM.

U. S. P. IX: Rubric to read not less than 9.5 per cent nor more than 10.5 per cent.—J. Am. Pharm Assoc. 1914, v. 3, p. 1564, and Abstr. Prop. Changes, Part 6, 1914, p. 2.

Brown, L. A.: One sample of diluted sulphuric acid analyzed; adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 120.

ACIDUM SULPHUROSUM.

Kedesdy, E.: Observations on the titrimetric determination of free sulphurous acid.—Chem.-Ztg. 1914, v. 38, p. 601–602. See also Sander, Ing. A., p. 1057–1058.

Wright Robert: The absorption spectra of sulphurous acid and sulphites.—Proc. Chem. Soc. 1914, v. 30, p. 264.

Skillern, P. G.: Sulphurous acid in the treatment of furuncles.—New York M. J. 1914, v. 100, p. 1218–1219.

ACIDUM TANNICUM.

Noyes, C. R.: Tannin is almost never U. S. P. and it may contain any amount of impurities.—J. Am. Pharm. Assoc. 1914, v. 3, p. 854; also Proc. Minnesota Pharm. Assoc. 1914, p. 190.

Iljin, Leo F.: On the composition of tannin.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 985–993.

Geake and Nierenstein: Contribution on the constitution of tannin.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 891–898.

Marden, J. W.: The determination of tannin. A study of the methods of extraction by means of immiscible solvents from the point of view of the distribution coefficient.—J. Ind. & Eng. Chem. 1914, v. 6, p. 320.

van Gijn, J. L.: A critical review of the methods for determining tannin.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 691–695; also Bull. sc. pharmacol. 1914, v. 21, p. 292.

Kobert, R.: On the biological detection and valuation of tannins.—Ber. deutsch. pharm. Gesellsch. 1914, v. 24, p. 470–495.

Fischer and Freudenberg: Observations on tannin and the synthesis of related substances.—Ber. deutsch. chem. Gesselsch. 1914, v. 47, p. 2485–2504; also Apoth.-Ztg. 1914, v. 29, p. 835.

Moore, F. J.: Recent synthetic studies in the tannin group; a review.—J. Ind. & Eng. Chem. 1914, v. 6, p. 450–452.

U. S. P. IX: Glycerite to be made by heating a mixture of tannin and glycerin in a suitable wide-mouthed bottle on a water bath.—J. Am. Pharm. Assoc. 1914, v. 3, p. 550, and Abstr. Prop. Changes, Part 3, 1914, p. 27.

Llewellyn, H. D.: The formula for glycerite of tannic acid should remain the same. The working directions should be changed.—Proc. Missouri Pharm. Assoc. 1914, p. 143.

Lansens, J.: Ovules of tannin, with directions for making the gelatin base.—Ann. Pharm. Louvain, 1914, v. 20, p. 1–2.

van Wisselingh, C.: On the physiological importance of the tannins.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 956–964; also Bull. sc. pharmacol. 1914, v. 21, p. 290.

Gortner and Banta: Tannin kills all amphibian eggs within 24 hours in a concentration of 0.0125 per cent.—Biochem. Bull. 1914, v. 3, p. 367.

ACIDUM TARTARICUM.

U. S. P. IX: Melting point omitted. Test for lead added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1564–1565, and Abstr. Prop. Changes, Part 6, 1914, p. 2–3.

Dück: A sample of tartaric acid failed to comply with the Ph. Helv. IV hydrogen sulphide test.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 234.

Grossmann, H.: The rotatory dispersion of tartaric and malic acids.—Tr. Faraday Soc. 1914, v. 10, p. 60–69. See also Darmois, E., p. 80–83; and Bruhat, G., p. 84–90.

Scoville, W. L.: Solutions of tartaric, malic, acetic, and formic acids are entirely decomposed by prolonged exposure to sunlight (70 to 200 hours), evolving carbon dioxide.—Bull. Pharm. 1914, v. 28, p. 484.

Astruc, H.: The determination of tartaric acid in potassium bitartrate.—Ann. Falsif. 1914, v. 50, p. 416–417.

Häussler, E. P.: The quantitative determination of tartaric acid in beverages and particularly in wines.—Ztschr. Anal. Chem. 1914, v. 53, p. 542–561; also Schweiz. Apoth.-Ztg. 1914, v. 52, p. 525–527, 553–556, 569–572.

Mann, E. W.: Nineteen samples of tartaric acid have been tested, to only one of which could objection be taken; this yielded 0.40 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 49.

Hill, C. A.: Of 467 samples of tartaric acid examined during the years 1910 to 1913, inclusive, the lead content varied from 0.5 to 80 parts per million. The arsenic content varied from 0 to 1 part per million.—Chem. & Drug. 1914, v. 85, p. 20.

Hankey, William T.: One lot of tartaric acid examined showed traces of heavy metals.—Proc. Ohio Pharm. Assoc. 1914, p. 54.

Post, Wilbur E.: The effect of tartrates on the human body.—J. Am. M. Assoc. 1914, v. 62, p. 592. See also Editorial, p. 616.

Salant, William: The pharmacology of sodium tartrate.—J. Am. M. Assoc. 1914, v. 63, p. 1076–1078; also Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 224–230.

ACIDUM TRICHLORACETICUM.

Heidingsfeld, M. L.: A new method of treating lupus vulgaris by the use of a saturated solution of trichloracetic acid.—J. Am. M. Assoc. 1914, v. 63, p. 1352–1356.

Sommer, E.: A suggestion to use trichloracetic acid as a substitute for carbon dioxides now in dermatology. The latter has many disadvantages.—Critic and Guide, 1914, v. 17, p. 278.

ACONITINA.

Marden and Elliott: From the study of distribution coefficients it is concluded that for aconitine chloroform and benzene are better solvents than ether and that the distribution ratios between these substances and water would be more favorable than in the case of ether.—J. Ind. & Eng. Chem. 1914, v. 6, p. 929.

Macht, D. I.: The action of drugs on the isolated pulmonary artery. Aconitine has a tendency to cause a primary stimulation to contraction, but on the whole had no appreciable effect.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 24.

Redfield, H. Hamilton: A study of aconitine, its physiologic action and therapeutic value.—Am. J. Clin. Med. 1914, v. 21, p. 775–779.

ACONITUM.

U. S. P. IX: Not more than 5 per cent of stem bases and other foreign matter should be present. Ash not exceeding 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 359, and Abstr. Prop. Changes, Part 2, 1914, p. 1.

Anon.: An illustrated description of *Aconitum napellus*.—Chem. & Drug. 1914, v. 84, p. 584.

Maines, E. L.: Aconite root was found to contain from 3.52 to 5.98 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

J. D. Riedel, A.-G.: Aconite contained from 3.6 to 6 per cent of ash and from 28.5 to 32.9 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 33.

Mann, E. W.—A single specimen of powdered aconite leaves yielded 10.26 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 6.

Lilly, J. K.: Much of the Japanese aconite root is on the market.—Proc. N. W. D. A. 1914, p. 262; also Oil, Paint & Drug. Rep. 1914, v. 86, September 30, p. 34.

Caesar & Loretz: The valuation of aconite, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 116–117.

Dichgans, H.: A comparative study of the several official assay methods for aconite and its preparations.—Apoth.-Ztg. 1914, v. 29, p. 392, 403, 414.

U. S. P. IX: To require ether soluble alkaloids of aconite. Assay practically as under belladonna.—J. Am. Pharm. Assoc. 1914, v. 3, p. 986, and Abstr. Prop. Changes, Part 4, 1914, p. 3.

Table showing reported variation in alkaloidal content of aconite root.

Reporters.	Number of samples.	Alkaloidal principles.		References.
		Minimum.	Maximum.	
Caesar & Loretz	7	0.754	0.884	Jahres-Ber., 1914, p. 40.
Hankey, W. T	4	.53	.55	Proc. Ohio Pharm. Assoc., 1914, p. 50.
Jensen, H. R	3	.383	.463	Evans' An. Notes, 1914, p. 5.
Mann, E. W	14	.24	.90	Ann. Rep. Southall Bros. & Barclay, 1914, p. 6.
Roberts, J. G	5	.31	.54	Proc. Pennsylvania Pharm. Assoc., 1914, p. 128.
Vanderkleed, C. E	8	.297	.784	Proc. Pennsylvania Pharm. Assoc., 1914, p. 160.

Dichgans, H.: The several official assay methods for aconite gave from 0.32 per cent, U. S. P., to 0.673 per cent, Ph. Belg. The Panchaud method was found to give correlating and generally satisfactory results.—Apoth.-Ztg. 1914, v. 29, p. 404.

U. S. P. IX: To require that the powdered extract yield not less than 1.8, nor more than 2.2 per cent of the ether soluble alkaloids.—J. Am. Pharm. Assoc. 1914, v. 3, p. 987, and Abstr. Prop. Changes, Part 4, 1914, p. 4.

U. S. P. IX: The tincture is to be assayed before being finished.—J. Am. Pharm. Assoc. 1914, v. 3, p. 544, and Abstr. Prop. Changes, Part 3, 1914, p. 21.

Street, John Phillips: Forty samples of tincture of aconite were analyzed. They contained from 0.013 to 0.051 gm. aconitine per 100 cc. 28 samples being below the U. S. P. standard of 0.045 gm.—Rep. Connecticut Agric. Exper. Sta. 1914, p. 334.

Zieffe, Adolph: Of 97 samples of tincture of aconite examined, 44 were not within 10 per cent of official strength.—Rep. North Dakota Exper. Sta. 1912, 1914, p. 159–160.

Brown, Lucius P.: One sample of tincture of aconite was found to be illegal.—Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 3, p. 3.

E'we and Vanderkleed: Tincture of aconite was found to form precipitates containing lead.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1685.

Freund, Hans: The composition of tincture of aconite and methods for testing the preparation—Pharm. Zentralh. 1914, v. 55, p. 263–254.

Caesar & Loretz: The toxic action of aconite root does not always comply with the alkaloidal content.—Jahres-Ber. 1914, p. 36.

Alderman, Theodore Davis: In trigeminal neuralgia, the use of aconite will prove specific.—Eclectic M. J. 1914, v. 74, p. 7.

Jones, J. M.: Aconite has been found useful in the treatment of pruritus.—Ellingwood's Therap. 1914, v. 8, p. 136.

ADEPS.

Helch, Hans: The tests for adeps should include a congealing point requirement and tests for plant oils.—Pharm. Post. 1914, v. 47, p. 571.

Anon.: By the new hardening process the American manufacturers are using in the manufacture of lards and cooking fats, a much larger share of cotton seed oil can be used therein than heretofore.—Montreal Pharm. J. 1914, v. 25, p. 180.

Sprinkmeyer and Diedrichs: The detection of plant fats in animal fats.—Ztschr. unters. Nahr. u. Genussm, 1914, v. 28, p. 236–244.

Fischer and Wewerinke: The detection of tallow in lard by the method of Polenski and Bömer.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 27, p. 361–378. See also Sprinkmeyer and Diedrichs, p. 571–581.

Alpers, Kaye: Contributions on the valuation of lard, with a report on 85 samples.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 27, p. 142–152.

Gift, W. J.: Lard is not a very satisfactory base for ointments because it becomes rancid.—Proc. Indiana Pharm. Assoc. 1914, p. 59.

Table showing some of the analytical results reported for lard.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Baker, W. L.	2	2	Proc. Am. Assoc. Pharm. Chem., 1914, p. 210.
Barnard, H. E.	22	5	Rep. Indiana Bd. Health, 1914, p. 397.
Foust, James	4	3	Bull. Pennsylvania D. & F. Div. 1914, v. 12, Nos. 1 and 2, p. 35.
Hortvet, Julius	64	36	Rep. Minnesota D. & F. Com. 1914, p. 47, 63.
Jaffa, M. E.	13	5	Rep. California Bd. Health, 1910–1912, Sacramento, 1913, p. 287.
Lynch, R. L.	37	23	Rep. District of Columbia Health Off. 1913. Washington, 1914, p. 90.
Shannon, F. L.	39	19	Bull. Michigan D. & F. Dept. 1914, January–February, p. 10, March–April, p. 13, July–August, p. 20, November–December, p. 15.
Strode, Sylvanus E.	10	2	Rep. Ohio D. & F. Div. 1914, p. 122.

ADEPS BENZOINATUS.

U. S. P. IX: To direct 10 gm. of Siam benzoin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1565, and Abstr. Prop. Changes, Part 6, 1914, p. 3.

Ziefle, Adolph: Of 75 samples of benzoinated lard examined 30 were not standard.—Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 144–147.

ADEPS LANÆ.

Scoville, W. L.: Adeps lanæ sometimes contains sulphur compounds in appreciable amounts.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Fernau, Albert: The detection of cholesterin is more readily accomplished in solution of acetic anhydride than in chloroform. For the determination of free fatty acids the use of benzol as a solvent is recommended.—Ztschr. Allgem. ësterr. Apoth.-Ver. 1914, v. 52, p. 227. p. 227.

Gift, W. J.: Wool fat, or lanolin, is used by itself when the medicinal substance is desired to produce a systemic effect; such preparations are called diadermic.—Proc. Indiana Pharm. Assoc. 1914, p. 59.

ADEPS LANÆ HYDROSUS.

Wilbert, M. I.: Lanolin is included in a number of the European pharmacopœias, either as the official title or as a synonym.—J. Am. Pharm. Assoc. 1914, v. 3, p. 655.

Jensen, H. R.: Sixteen samples of lanolin gave very uniform figures: Saponification value, 92.5 to 100.2; iodine value, 41.7 to 48.3.—Evans's An. Notes, 1914, p. 40.

Salomon, Hans: The determination of the unsaponifiable constituents of the official oils and fats and of lanolin by the digitonin method.—Ber. deutsch. pharm. Gesellsch. 1914, v. 24, p. 189–193.

Helch, Hans: Hydrated wool fat loses water in the exposed layers, becomes darker in color, and for this reason is frequently objected to. The lanolin preparation of the Ph. Germ. V, which contains a small amount of liquid petrolatum, has the tendency to hold the contained water more securely.—Pharm. Post, 1914, v. 47, p. 571.

Wester, D. H.: Cans of hydrated wool fat were found to be approximately 15 per cent short in weight. On inquiry the dealer expressed the belief that this practice had prevailed for many years.—Pharm. Weekblad, 1914, v. 51, p. 1439.

ÆTHER.

U. S. P. IX: Rubric to read from 95.5 per cent to 97.5 per cent by weight of ethyl oxide. Ether for anesthesia to be dispensed only in small well-closed containers. Specific gravity to read from 0.713

to 0.716 at 25°. Boiling point about 35°. Modified tests for aldehyde and added tests for peroxides. Test for undue amount of alcohol or water omitted.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1565, and Abstr. Prop. Changes, Part 6, 1914, p. 3.

Finnemore, H.: Anesthetic ether of commerce.—Pharm. J. 1914, v. 92, p. 138–139. For discussion see p. 160; also Year-Book of Pharmacy, 1914, p. 380–385. For discussion see p. 385–388.

Herzog, J.: Ether for anesthesia and the care necessary to prevent contamination.—Apoth.-Ztg. 1914, v. 29, p. 68–69.

Anon.: According to the Ph. Brit. V, ether may now be prepared from industrial methylated spirit and may be used for all pharmaceutical purposes.—Chem. & Drug. 1914, v. 85, p. 488.

Orrick and Vanderkleed: One sample of ether examined was practically free from alcohol and water, instead of containing about 4 per cent, as required by the U. S. P. This sample had a specific gravity of 0.713 instead of 0.716.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 137.

Bonz and Sohn: The nature of the cork extract found in ether and the possible influence of this extract.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70–71. See also Herzog, J., p. 72, and p. 121.

Fernau, Albert: The concentration of the solution of potassium iodide for the detection of ethyl peroxide in ether is an important factor. A 10 per cent solution in recently boiled water is reliable.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Helch, Hans: The potassium iodide test is a rather severe one for ether to be used for ordinary commercial purposes. The test with alkali hydroxide does not always suffice to detect aldehydes and vinyl alcohol.—Pharm. Post, 1914, v. 47, p. 571.

Frerichs, G.: Ether prepared from denatured alcohol frequently contains contaminations, more particularly, methylethyl ether and acetone, that reduce its boiling point. The determination of this factor is, therefore, important.—J. Pharm. Elsass-Lothr. 1914, v. 41, p. 235.

Barton, P. F.: To avoid mistaking chloroform for ether, it is suggested to have chloroform colored red and ether colored green.—Lancet, 1914, v. 187, p. 60. See also Editorial: Pharm. J. 1914, v. 92, p. 42; and Clark, W. Inglis: Year-Book of Pharmacy, 1914, p. 416–417.

Anon.: The normal freezing point of ethyl ether has been determined by Henning as —123.6°.—Nature, 1914, v. 93, p. 16.

Boothby, Walter M.: The determination of the anesthetic tension of ether vapor in man, with some theoretical deductions therefrom, as to the mode of action of the common volatile anesthetics.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 379–392.

Gwathmey, James T.: Oil-ether anesthesia. An attempt to abolish inhalation anesthesia.—New York M. J. 1914, v. 99, p. 211–214. See also Editorial, p. 642.

Jones, Rupert Llewellyn: Ether anesthesia by the intratracheal method. A report of 49 cases.—Lancet, 1914, v. 187, p. 1087–1089. See also Pratt, J. P.: J. Am. M. Assoc. 1914, v. 62, p. 37–38.

Page, H. M.: Intrapharyngeal administration of warmed ether vapor by the nasal route; with an illustration of the apparatus.—Lancet, 1914, v. 187, p. 156.

Luke, H. Clifton: Ether-oil rectal anesthesia; some theoretical considerations.—Med. Rec. 1914, v. 85, p. 839–840.

Coburn, Raymond C.: Increase in toxication of ether by new methods of administration.—J. Am. M. Assoc. 1914, v. 62, p. 364.

Fisk, Tracy L.: Safeguarding the ether and chloroform bottles against the possibility of driving liquid ether or chloroform down the patient's throat, etc.; illustrated.—J. Am. M. Assoc. 1914, v. 62, p. 38.

Gallant, A. Ernest: An improved ether inhaler.—New York M. J. 1914, v. 100, p. 861–862.

Sheaff, Philip Atlee: An aid in the use of the Allis inhaler; illustrated.—New York M. J. 1914, v. 100, p. 421–422.

Whiting, Maurice H.: Anesthetics in eye work. Table enumerating the operations performed in the In-patient Theater, Royal London Ophthalmic Hospital, under general anesthetics, 1909–1913, inclusive.—Brit. M. J. 1914, v. 2, p. 471. See comments by Marshall, C. Devereux, also Traquair, H. M., p. 541.

Githens and Meltzer: The nature of the cessation of respiration in deep ether anesthesia.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 523.

Flagg, Paluel J.: A previously unemphasized feature in the construction of nitrous oxide-oxygen-ether apparatus.—J. Am. M. Assoc. 1914, v. 62, p. 35–36.

Guy, W.: For prolonged dental operations, nitrous oxide and ether, in mixture or sequence, is of proved value.—Dental Cosmos, 1914, v. 56, p. 1295.

Fairlie, H. P.: A comparison of the actions of chloroform and ether on the blood pressure.—Lancet, 1914, v. 186, p. 603–606. See also Walton, Albert, p. 714; and Smith, G. McCall, p. 784–785.

Báron and Barsony: On the action of chloroform and of ether narcosis on the motor function of the stomach.—Arch. ges. Physiol. 1914, v. 158, p. 464–477.

Buck, Leonard W.: Effects of chloroform and of ether anesthesia on the protein contents of the blood serum of rabbits.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 553–557.

DeTarnowsky, George: A preliminary clinical report of 30 cases of infection treated by the Souligoux-Morestin method of ether lavage.—J. Am. M. Assoc. 1914, v. 62, p. 281–282.

Jeanneret, L.: Practical experience would seem to sustain Souligoux's claim as to the advantages of ether for lavage of the peritoneum.—J. Am. M. Assoc. 1914, v. 62, p. 578.

Santy, P.: Report of a series of experiments on rabbits to determine the immediate and after effects of flushing out the peritoneum extensively with ether.—J. Am. M. Assoc. 1914, v. 62, p. 1587.

For additional references on ether see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

ÆTHER ACETICUS.

Szeberenyi, P.: The examination of acetic ether.—Ztschr. Anal. Chem. 1914, v. 53, p. 683.

Fernau, Albert: The neutral reaction of acetic ether is met with only in recently distilled preparations. The commercial preparation is frequently acid.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Fletcher and Jones: Equilibrium in the system; ethyl alcohol, acetic acid, ethyl acetate and water, and its apparent displacement by mineral chlorides.—J. Chem. Soc. Lond. 1914, v. 105, p. 1542–1547.

ÆTHYLIS CHLORIDUM.

Liberati, T.: Some ethyl chloride is sold in nickeled brass tubes with the nozzle attachment and sealed in the tube with white lead, but no metallic contamination could be detected in the ethyl chloride.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 138.

Berthelot, Albert: On the use of ethyl chloride for the sterilization of microbial vaccines and the preparation of bacterial vaccines.—Compt. rend. Soc. biol. 1914, v. 76, p. 29–30.

Guy, W.: Ethyl chloride is stated to be 200 times as dangerous as nitrous oxide. Like chloroform, it can cause vagal inhibition, and this constitutes its chief danger.—Dental Cosmos, 1914, v. 56, p. 1296.

AGAR AGAR.

U. S. P. IX: The dried mucilaginous substance extracted from *Gracilaria* (*Sphærococcus*) *lichenoides* Greville, and other marine *algæ* growing along the eastern coast of Asia. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 360, and Abstr. Prop. Changes, Part 2, 1914, p. 2.

Gehe & Co.: The production of agar agar in Japan, with a table showing the amount and the value of the drug exported to different countries in 1910 and 1911.—Handelsbericht, 1914, p. 46–47.

Anon.: Several illustrations showing the method of preparing agar agar.—Southern Pharm. J. 1914, v. 6, p. 548.

Alsberg, C. L.: It does not appear that the term "vegetable gelatin" is a correct designation for agar agar, as it is not a gelatin and can not be considered a substitute for it, except in its power to form a jelly with water.—S. R. A.-Chem. 1914, p. 205.

Lilly, J. K.: One sample of powdered agar agar was found to be adulterated with corn starch.—Proc. N. W. D. A. 1914, p. 262; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Rippetoe, J. R.: Four samples of agar agar contained from 4.4 to 8.23 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 444.

Bastedo, W. A.: Agar agar absorbs water and increases greatly in bulk, so that it softens and enlarges the fecal mass.—Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 153. See also Editorial: Drug Topics, 1914, v. 29, p. 163.

Einhorn, Max: Agar agar as a basis for medicaments for internal administration, with formulas for a number of preparations, including phenolphthalein agar, rhubarb agar, and ipecacuanha agar.—D.-A. Apoth.-Ztg. 1914, v. 35, p. 34–35.

ALBUMEN.

Beringer, George M.: A proposed N. F. monograph for Albumen Ovi Recens, fresh egg albumen. The freshly separated liquid white of recently laid eggs of the hen *Gallus domestica* Temminck (Fam. Phasianidae).—J. Am. Pharm. Assoc. 1914, v. 3, p. 873. See also p. 877 and 879.

Waterman, N.: On the differentiation between hen albumen and duck albumen and the utilization of the product for commercial purposes.—Chem. Weekblad, 1914, v. 11, p. 120–126.

Landsteiner, Karl: A further contribution on albumin derivatives.—Biochem. Ztschr. 1914, v. 58, p. 362–364.

Berceller, L.: Historical remarks on albumin and peptone solutions.—Kolloid-Ztschr. 1914, v. 14, p. 1–2.

Ringer, W. E.: The behavior of albumin to salts in solutions of varied concentration.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 911–923.

Editor "Therapeutics": The value of raw egg white, or egg albumen, as a nutrient has been very much overlauded, and dependence on egg albumen as a food in serious conditions is a mistake.—J. Am. M. Assoc. 1914, v. 62, p. 615.

ALCOHOL.

Berger: A review of a recent communication on the history of alcohol; the Arabic source of the product.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 521–522.

Boysen-Jensen, P.: The decomposition of sugar in the course of alcoholic fermentation.—Biochem. Ztschr. 1914, v. 58, p. 451–466.

Kostytschew, S.: An experimental study on the formation of acetaldehyde during alcoholic fermentation.—Biochem. Ztschr. 1914, v. 64, p. 237–250. See also comments by Neuberg and Kerb, p. 251–256, and reply by Kostytschew, S., p. 367–372.

Chenard, E.: The principles of the distillation of alcohol.—Bull. Soc. chim. France, 1914, v. 15, p. 592–595.

Thatcher, F.: Process of making alcohol. U. S. Patent 1,096,965, May 19, 1914.—J. Soc. Chem. Ind. 1914, v. 33, p. 659. See also Ekstrom, G., p. 659.

Chenard, E.: The theory of the fractional distillation of mixtures of water and alcohol.—Bull. Soc. chim. France, 1914, v. 15, p. 646–649.

Wagner, T. B.: The production of ethyl alcohol from lumber waste.—J. Ind. & Eng. Chem. 1914, v. 6, p. 74. See also Kressmann, F. W.: Chem. Eng. 1914, v. 20, p. 147–151; and Cohn, Robert: Pharm. Ztg. 1914, v. 59, p. 62–63.

True, Rodney H.: The extensive alcohol industry of Germany as an individual industry has proven a failure, but as a part of an economic farming arrangement it has not been a failure.—Meyer Bros. Drug. 1914, v. 35, p. 68.

Rakshit and Sinha: A table of specific gravities of spirits corresponding to indications of glass hydrometers for use with Bedford's corrected Sikes' tables.—J. Soc. Chem. Ind. 1914, v. 33, p. 288–289. See also p. 619; Joseph and Rae, p. 991–992; and Carter, F. G., p. 993–994.

Barendrecht, H. P.: Alcoholometry and rational fractionation.—Proc. Chem. Soc. 1914, v. 30, p. 160–161.

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Wilbert, M. I.: The use of solidified alcohol for rubbing and for general disinfection purposes is meeting with increasing popularity. The production of alcohol in solid form would appear to offer a possibility for denaturing the product in such a way as to make the tax-free article available for external use in medicine.—Am. J. Pharm. 1914, v. 86, p. 563.

Anon.: To make solidified alcohol, heat 500 parts of 90 per cent alcohol over a water bath to about 140° F. and add to it 1 part of gum lac and 15 parts of dry Venetian soap. To facilitate dissolution the soap should be finely grated and the solution will require repeated shaking.—Spatula, 1914, v. 20, p. 646.

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Manzoff, Christo D.: A new color reaction for the detection of methyl alcohol by means of vanillin.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 27, p. 469–470.

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Scoville, W. L.: One lot of aloes was free from aloin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Linke, H.: One sample of aloes was found to contain 3 per cent of ash. The objection being raised to the low ash content permitted by the Ph. Germ. V, 30 samples of the drug were examined and found to contain from 0.8 to 0.96 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 501.

Maines, E. L.: Aloes, Socotrine, was found to contain from 4.63 to 8.95 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Rippetoe, J. R.: Fourteen samples of aloes contained from 74.14 to 97.20 per cent of alcohol extract, from 52.71 to 82.16 per cent of water extract and from 0.81 to 6.50 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 436.

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E'we, G. E.: Of eight lots of aloes tested, all were within the U. S. P. limit of 10 per cent of moisture, ranging from 3.9 to 9.9 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 128.

Warren, L. E.: The detection of emodin-bearing drugs in presence of phenolphthalein. The method did not give satisfaction with aloes.—Am. J. Pharm. 1914, v. 86, p. 444–449.

Mann, E. W.: Water soluble matter in 20 samples of aloes ranged from 33.0 to 72.5 per cent, ash from 0.80 to 3.80 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 6.

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Anon.: A description of *Althæa officinalis*, and an illustration showing a flowering branch of this plant.—Chem. & Drug. 1914, v. 85, p. 110.

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Linke, H.: A limitation for ash would be a desirable addition to the pharmacopœia. One sample examined was found to give 4.8 per cent.—Apoth.-Ztg. 1914, v. 29, p. 567.

Rippetoe, J. R.: Two samples of althæa root were found to contain 21.22 and 28.60 per cent of water soluble extract, and 7.08 and 6.93 per cent of ash, respectively.—Am. J. Pharm. 1914, v. 86, p. 436.

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McCaffrey, J. C.: Of 11 lots of dried and powdered alum examined, 6 exceeded in moisture content our arbitrary limit of 5 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 129.

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Finnemore, Horace: The incompatibility of sodium nitrite and ammonium bromide is due to the formation of ammonium nitrite by double decomposition. This product decomposes into water and nitrogen, the latter being responsible for the occasional bursting of the container.—Brit. M. J. 1914, v. 1, p. 790–791.

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AMMONII CARBONAS.

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Mann, E. W.: It is practically impossible for even the freshly powdered carbonate to comply with the official requirements.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 42.

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Hill, C. A.: Of 178 samples of ammonium carbonate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 125 parts per million. The arsenic content varied from 0 to 0.5 part per million.—Chem. & Drug. 1914, v. 85, p. 20.

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Southworth, Thomas S.: The influence of starch on infant digestion.—J. Am. M. Assoc. 1914, v. 63, p. 1377.

For additional references on the chemistry of starch, see Chem. Abstr.; J. Chem. Soc. Lond; and Chem. Zentralbl.

ANISUM.

U. S. P. IX: The dried ripe fruit, with not more than 3 per cent of foreign seeds and other vegetable matter. The drug is described in detail. Ash not exceeding 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 362, and Abstr. Prop. Changes, Part 2, 1914, p. 4.

Alsberg, C. L.: Anise should contain not less than 97 per cent of sound anise seed and not more than 9 per cent of ash.—S. R. A.–Chem. 1914, p. 529; also Drug. Circ. 1914, v. 58, p. 545, and Oil, Paint & Drug Rep. 1914, v. 86, July 27, p. 11.

J. D. Riedel, A.–G.: Anise contained from 5.6 to 9.5 per cent of ash and from 28 to 31.4 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Mann, E. W.: Samples of Russian anise seed were found to contain from 5.90 to 13.10 per cent of ash. Samples of Spanish aniseed were found to contain from 5.63 to 14.66 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 7.

Jensen, H. R.: Four samples of Russian anise yielded from 8.4 to 10.8 per cent of ash.—Evans's An. Notes, 1914, p. 8.

Plahl, Wilhelm: The detection of extracted anise seed, considerable reliance being placed on the odor and taste with individual seed.—Arch. Chem. Mikros. 1914, v. 7, p. 209–211.

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Mann, E. W.: The specific gravity of the Ph. Brit. for oil of chamomile is too low. The figure for a sample of authentic oil of English distillation was 0.919, with refractive index, 1.4441.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 30.

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ANTIMONIUM SULPHURATUM, N. F.

Rupp, E.: A modified method for the determination of antimony in sulphuretted antimony.—Südd. Apoth.-Ztg. 1914, v. 54, p. 322; also Apoth.-Ztg. 1914, v. 29, p. 724.

Lehmann and Berdau: The testing of antimony sulphide with a table showing the results obtained in connection with a number of samples.—Apoth.-Ztg. 1914, v. 29, p. 186–187.

Mann, E. W.: Several samples of commercial black antimony have given fairly satisfactory figures. The maximum amount of silicious matter found was but 2.2 per cent, and for arsenic, 1,000 parts per million.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 43.

ANTIPYRINA.

Williams, Joseph H.: The manufacture of antipyrine.—Pharm. J. 1914, v. 93, p. 293. See also Anon.: Chem. & Drug. 1914, v. 85, p. 273; and Southern Pharm. J. 1914, v. 7, p. 59.

Fernau, Albert: A test for reducing substances in antipyrine is needed.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 228.

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Kebler, L. F.: Outline of method for the determination of antipyrine in compressed tablets.—J. Am. Pharm Assoc. 1914, v. 3, p. 1087.

Kollo, Konstantin: Ampoules of antipyrine may be sterilized for 20 minutes at 110° or for 30 minutes at 105°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Mannich, C.: Incompatibility of hexamethylenamine and antipyrine.—Pharm. Post, 1914, v. 47, p. 538. Also Merck's Rep. 1914, v. 23, p. 278.

Anon.: Antipyrine and aspirin should not be mixed together. The acetic ester will be split off and keep the powder moist.—Am. Druggist, 1914, v. 62, p. 93.

Isenschmid, R.: Experimental observations on the action of antipyrine on body temperature of animals without thermo regulation.—Arch. exper. Path. u. Pharm. 1914, v. 75, p. 10–32.

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Mann, E. W.: Commercial apiol is, in our experience, a very variable substance.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 28.

Jensen, H. R.: Three pure samples of apiol gave: Specific gravity, from 1.096 to 1.121; refractive index, 1.525 to 1.536; saponification value, 13.7 to 42.2; iodine value, 207.5 to 221.2.—Evans's An. Notes, 1914, p. 9.

Brenot, M.: A fatal case of poisoning by apiol in a young woman of 25, who, at one time, took 14 capsules of apiol. Severe symptoms were developed three days later.—Schweiz. Apoth.—Ztg. 1914, v. 52, p. 6–7.

Celery Seed.—U. S. P. IX: The dried ripe fruit of *Petroselinum sativum* with not more than 5 per cent of foreign seeds and other vegetable matter.—J. Am. Pharm. Assoc. 1914, v. 3, p. 393, and Abstr. Prop. Changes, Part 2, 1914, p. 35.

Alsberg, C. L.: Celery seed should contain not less than 90 per cent of sound celery seed and not more than 10 per cent of ash.—S. R. A.-Chem. 1914, p. 529; also Drug. Circ. 1914, v. 58, p. 545.

Schimmel & Co.: The price of celery seed has been out of all proportion to the cheap offers for celery oil by the French producers.—Schimmel & Co. Semi-Ann. Rep. April, 1914, p. 43.

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U. S. P. IX: Restricted to the dried rhizome and roots of *Apocynum cannabinum* Linné. Description designed to facilitate the detection of other species.—J. Am. Pharm. Assoc. 1914, v. 3, p. 362, and Abstr. Prop. Changes, Part 2, 1914, p. 4.

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Mundy, W. N.: Apocynum is a sovereign remedy in cardiac dropsy.—Ellingwood's Therap. 1914, v. 8, p. 362.

Morrow, Thomas L.: Apocynum is a useful remedy in the treatment of acute alcoholism.—Ellingwood's Therap. 1914, v. 8, p. 134.

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Dott, D. B.: Note on the formation of apomorphine from morphine by the action of hydrochloric acid.—Pharm. J. 1914, v. 92, p. 164. For discussion see p. 185; also Chem. & Drug. 1914, v. 84, p. 239.

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Kollo, Konstantin: Ampoules of apomorphine hydrochloride should be prepared in sterile apparatus with acetic acid in place of hydrochloric acid.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Miller, Joseph L.: The clinical value of expectorants. Apomorphine when given in sufficiently large doses to animals increases bronchial secretion.—Am. J. M. Sc. 1914, v. 148, p. 475.

Braun, Israel: Apomorphine, hypodermically, is a very useful remedy in bronchial asthma.—Merck's Arch. 1914, v. 16, p. 107.

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U. S. P. IX: To require that water be practically tasteless and odorless. Solids now limited to 0.03 gm. in 100 cc. Modified tests for heavy metals and a new test for limit of coloration.—J. Am. Pharm. Assoc. 1914, v. 3, p. 524, and Abstr. Prop. Changes, Part 3, 1914, p. 1.

Becker, I. A.: The proposed tests for iron in water establishes a much less rigid standard than the present U. S. P. heavy metal test.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1023; also Nat. Druggist, 1914, v. 44, p. 419.

Bahlmann, Clarence: The determination of hardness in natural waters.—J. Ind. & Eng. Chem. 1914, v. 6, p. 209–211. See also Winkler, L. W.: Ztschr. Anal. Chem. 1914, v. 53, p. 409–415; and Nockmann, Else: Pharm. Zentralh. 1914, v. 55, p. 435–437.

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Mayer, Otto: The determination of iron in natural waters.—Pharm. Ztg. 1914, v. 59, p. 422.

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Pick, H.: The determination of minute quantities of lead in water supplies.—Arb. k. Gsndhtsamte, 1914, v. 48, p. 155–164.

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Froboese, Victor: Contribution on water analysis. The rapid determination of magnesium by titration in the presence of calcium.—Ztschr. Anorg. Chem. 1914, v. 89, p. 370–376.

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Winslow, C.-E. A.: A book review of a volume on the microscopy of drinking water by George Chandler Whipple.—Science, 1914, v. 40, p. 448–450.

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Charitschkoff, K.: The sterilization of water by means of filtration.—Chem.-Ztg. 1914, v. 38, p. 222.

von Recklinghausen, M.: The ultra-violet rays and their application for the sterilization of water. Illustrated description of a lamp and other apparatus used.—J. Frankl. Inst. 1914, v. 178, p. 681–704.

Phelps, Earle B.: The chemical disinfection of water. Illustrated descriptions of methods for regulating the dose.—Public Health Rep. 1914, v. 29, p. 2709–2715.

Steffenhagen, Karl: A review of the available literature on the treatment of water by means of chlorinated lime.—Hyg. Rundschau, 1914, v. 24, p. 185–208.

Vosmaer, A.: The purification of water. Observations on the use of chlorinated lime.—Chem. Weekblad, 1914, v. 11, p. 927–930. See also p. 837–842.

Thomas, Stanley Judson: The hypochlorite of lime treatment of a municipal water supply.—J. Ind. & Eng. Chem. 1914, v. 6, p. 548–552. See also Thomas and Sandman, p. 637–639.

Krantz, L. P.: The purification of water by chemical means. The use of aluminum sulphate.—Chem. Weekblad, 1914, v. 11, p. 909–910.

Bohlig and Roth: The purification of water by means of magnesium.—Chem.-Ztg. 1914, v. 38, p. 859–860.

Pryer, R. W.: Water purification by ozone, with report on the Ann Arbor plant.—J. Ind. & Eng. Chem. 1914, v. 6, p. 797–800.

Rohland, P.: The colloidal clay method of purifying waste waters.—Seifensieder Ztg. 1914, v. 41, p. 310–311. See also p. 1210–1211.

Geyser, Albert C.: The therapeutic uses of water; a review.—Am. Med. 1914, v. 20, p. 103–106.

For additional references see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

AQUÆ.

U. S. P. IX: An abstract of the proposed changes in the formulas and standards for the official waters.—J. Am. Pharm. Assoc. 1914, v. 3, p. 524–526, and Abstr. Prop. Changes, part 3, 1914, p. 1–3.

Llewellyn, H. D.: It is recommended that the waters containing volatile substances be retained in their present formulas, strength, and method of preparation.—Proc. Missouri Pharm. Assoc. 1914, p. 141.

Rhode, R. E.: Aromatic waters should be made with magnesia instead of talcum. Recently boiled water may lead to better preparations.—J. Am. Pharm. Assoc. 1914, v. 3, p. 901.

Mittelbach, Wm.: The use of recently boiled distilled water in the preparation of the official waters seems a good improvement and will add to the keeping qualities of these preparations.—Proc. Missouri Pharm. Assoc. 1914, p. 106.

Becker, I. A.: The requirement that recently boiled distilled water be used in the making of medicated waters is considered unnecessary.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1024.

Curry, Gordon L.: Of the 19 official waters, 12 can be advantageously prepared in the retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 56.

AQUA AMMONIÆ.

U. S. P. IX: Rubric to read not less than 9.5 nor more than 10.5 per cent by weight of ammonia. Specific gravity to read about 0.958 at 25°. Residue on volatilization not to exceed 0.02 per cent when evaporated in a platinum dish at 120°, from 25 cc. of ammonia water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 525, and Abstr. Prop. Changes, part 3, 1914, p. 2.

For patents on the manufacture of ammonia see J. Soc. Chem. Ind. 1914, v. 33, p. 485, 593, 750.

Bagley, D.: A further contribution to the history of the direct production of ammonia.—Ztschr. ang. Chem. 1914, v. 27, p. 378–383. See also Haber, F., p. 473–477, and Ohnesorge, Otto, p. 525–527.

Serpek, O.: The inorganic synthesis of ammonia.—Ztschr. ang. Chem. 1914, v. 27, p. 41–48.

Dieffenbach, O.: The conversion of ammonia to nitric acid and ammonium nitrate from a commercial point of view.—Chem. Ind. 1914, v. 37, p. 265–269.

Oesterheld, G.: The electrochemical oxidation of ammonia.—Ztschr. anorg. Chem. 1914, v. 86, p. 105–142.

Anon.: Water of ammonia is frequently ordered as 3 f or 4 f. For 3 f the 10 per cent or 16° Baumé product is supplied. The 4 f ammonia contains 17 per cent of gas and is 20° Baumé.—Meyer Bros. Drug. 1914, v. 25, p. 202.

Fernau, Albert: As an indicator for the titration of aqua ammoniæ, methyl orange is preferred.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 228.

Goerlich, G.: The detection of empyreumatic contaminations in ammonia water.—Pharm. Ztg. 1914, v. 59, p. 460–461, 472–473.

Haber, F.: A report on seven examinations of ammonia made in recent years for the purpose of determining the thermic and chemical behavior of ammonia.—Ztschr. Elektrochem. 1914, v. 20, p. 597–604.

Snell, J. F.: Commercial household ammonia in Canada.—J. Soc. Chem. Ind. 1914, v. 33, p. 1177–1178.

Richter, Ernst: Aqua ammoniæ did not comply with the hydrogen sulphide test.—Apoth.-Ztg. 1914, v. 29, p. 211.

Table showing some of the analytical results reported for ammonia water.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	4	4	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, Lucius P.	31	28	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
E'we, G. E.	27	3	Proc. Pennsylvania Pharm. Assoc. 1914, p. 129.
Woods, Chas. D.	14	11	Off. Insp. Maine Agric. Exper. Sta. 1913, 1914, No. 48, p. 22–23.

AQUA AMMONII FORTIOR.

U. S. P. IX: Rubric to read not less than 27 nor more than 29 per cent by weight of ammonia. Specific gravity about 0.897 at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 525, and Abstr. Prop. Changes, part 3, 1914, p. 2.

White, Wm. R.: A method of handling stronger ammonia water, based on the principle of a siphon started by compressed air.—J. Am. Pharm. Assoc. 1914, v. 3, p. 506–507.

Hill, C. A.: Of 46 samples of solution of stronger ammonia examined during the years 1911 to 1913, inclusive, the lead content varied from 0 to 17. The arsenic content varied from 0 to 0.3 part per million.—Chem. & Drug. 1914, v. 85, p. 21.

E'we, G. E.: Of 10 lots of stronger ammonia water examined, 3 were slightly below the required 28 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 129.

Williams, Ed. E.: Commercially, stronger ammonia water always tests about 26 per cent. If impracticable to manufacture 28 per cent, the standard should be lowered; if not, the manufacturers should be made to conform to it.—Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

AQUA AURANTII FLORUM FORTIOR.

U. S. P. IX: To be free from empyreuma, mustiness, and mucilaginous growths. Should be neutral or show only a slightly acid reaction to litmus and leave no residue on evaporation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 525, and Abstr. Prop. Changes, Part 3, 1914, p. 2.

AQUA DESTILLATA.

U. S. P. IX: Amount of distillate collected to read 750 volumes. Any kind of still may be used if the water complies with the tests given. Modified tests for heavy metals, for ammonia, and for oxidizable substances.—J. Am. Pharm. Assoc. 1914, v. 3, p. 525, and Abstr. Prop. Changes, Part 3, 1914, p. 2.

Murphy, J. V.: Preservation of distilled water. A description of an efficient container designed to prevent contamination with dust or organisms.—Pract. Drug. 1914, v. 32, p. 447.

Barladean, A. G.: The testing of distilled water for purity.—Pharm. Zentralh. 1914, v. 55, p. 115–121. See also Schweiz. Apoth.-Ztg. 1914, v. 52, p. 205–209, and p. 369–371.

Mann, E. W.: Absolute purity in waters is unattainable even under the most rigid precautions. The comparative purity must be judged by the standard of the use to which it is to be put.—Chem. & Drug. 1914, v. 84, p. 672–673.

Raubenheimer, Otto: Pharmacists should know that distilled water is not necessarily sterile water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 799.

Reach, Franz: The nature, number, and kind of bacteria found in distilled water, with a practical method for avoiding the infection of distilled water.—Pharm. Post, 1914, v. 47, p. 279–280.

Wischo, Fritz: The preparation of distilled water to be used in the making of physiological salt solution and in salvarsan injections.—Pharm. Post, 1914, v. 47, p. 145–151; also Pharm. Zentralh. 1914, v. 55, p. 585–587.

Frary, Guy G.: One sample of distilled water examined; solids excessive.—Rep. South Dakota, F. & D. Com. 1914, p. 255.

Ziefle, Adolph: Of 65 samples of distilled water examined, only 6 samples were entirely free from sediment. Eleven of the samples gave a distinct reaction with litmus paper.—Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 141–143.

AQUA HYDROGENII DIOXIDI.

U. S. P. IX: To permit the use of not exceeding 0.4 gm. of acetanilide to each 1,000 cc. as a preservative. Discolored or odorous solutions should not be used. Tests modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 529, and Abstr. Prop. Changes, Part 3, 1914, p. 6.

Anon.: Oxygenated water (hydrogen peroxide) was discovered by Louis Jacques Thénard in 1818.—Pharm. Era, 1914, v. 47, p. 155–156.

Wilbert, M. I.: The title "Solution of hydrogen dioxide" has been severely criticized by chemists, who point out that dioxide is used to designate certain definite combinations, like manganese dioxide, and is not applicable to a peroxide such as exists in the official solution.—J. Am. Pharm. Assoc. 1914, v. 3, p. 655.

White, J. Stanley: Hydrogen peroxide solution. A review of the official requirements for solution of hydrogen peroxide and the preservation of the preparation by means of acetanilide.—Pharm. Era, 1914, v. 47, p. 263.

Schaidhauf, A.: U. S. Patent 1,109,791. A neutral solution of hydrogen peroxide is rendered stable by the addition of soap.—J. Ind. & Eng. Chem. 1914, v. 6, p. 1050.

Wagner, Hans: A recent patent provides for the production of hydrogen peroxide from electrolytically produced potassium.—Südd. Apoth.-Ztg. 1914, v. 54, p. 627.

Wolf, Paul Max: On the synthesis of 100 per cent hydrogen peroxide by means of the silent electrical discharge.—Ztschr. Elektrochem. 1914, v. 20, p. 204–219.

Pietzsch and Adolph: Process of producing hydrogen peroxide.—J. Soc. Chem. Ind. 1914, v. 33, p. 200. See also patents, p. 353, 514, 693, 750, 1009.

Fernau, Albert: A limitation for residue and a test for barium and for arsenic should be included in the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Sperber, Joachim: The displacement of acids by hydrogen dioxide.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 2–6, 245–248. See also Apoth.-Ztg. 1914, v. 29, p. 69; and O. R., p. 685–686.

Marden, J. W.: A modified method for determining acetanilide in hydrogen peroxide by shaking out with chloroform.—J. Ind. & Eng. Chem. 1914, v. 6, p. 315–318.

Kirby, William: Hydrogen peroxide preserved by acetanilide.—Pharm. J. 1914, v. 92, p. 274–275. See also Stewart, R., p. 353; Finnemore, H., p. 421–422; and Timolat, J. P., p. 746.

Gane, E. H.: A score of makers of peroxide have each been claiming to be the original discoverers of this excellent method of preserving hydrogen peroxide solutions.—Pharm. J. 1914, v. 92, p. 698.

E'we and Vanderkleed: The use of more acetanilide than three-sixteenths grain per fluid ounce does not prevent a gradual deterioration of the solution, and is objectionable because it greatly increases the acidity and color.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 276.

Murray, B. L.: Note on the acidity of hydrogen peroxide solution, with outline of method for the quantitative determination of free acid present.—J. Am. Pharm. Assoc. 1914, v. 3, p. 650; also Pract. Drug. 1914, v. 32, p. 498.

Lefeldt, M.: The Ph. Germ. V. test for barium salts in hydrogen peroxide could be improved.—Pharm. Ztg. 1914, v. 59, p. 42.

White, J. Stanley: Hydrogen peroxide solution. The differences in strength met with in commercial samples.—Pharm. J. 1914, v. 92, p. 536–537.

Table showing some of the analytical results reported for solution of hydrogen peroxide.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	10	2	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A	6	3	Proc. Kentucky Pharm. Assoc. 1914, p. 119.
Brown, Lucius P	17	3	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
Committee on drug adulteration.	8	1	Proc. Missouri Pharm. Assoc. 1914, p. 104.
Congdon, Leon A	6	3	Rep. Kansas Bd. Health, 1914, p. 100.
Jackson, Cook, and Strickland	30	6	Rep. Rhode Island F. & D. Com. 1914, p. 15.
Linke, H	22	1	Apoth.-Ztg. 1914, v. 29, p. 684.
Lythgoe, Hermann C	3	0	Rep. Massachusetts Bd. Health, 1913, 1914, p. 410.
Marquier, Adolph F	10	1	Proc. New Jersey Pharm. Assoc. 1914, p. 110.
Newcomb, George D	11	0	Proc. Iowa Pharm. Assoc. 1914, p. 28.
Stadtmueller, F. H	32	4	Rep. Connecticut D. & F. Com. 1914, p. 15.
Strode, Sylvanus E	14	5	Rep. Ohio D. & F. Div. 1914, p. 119.
Sudro, W. F	80	15	Rep. North Dakota Exper. Sta. Rec. 1912, 1914, p. 169–172.
Todd, A. R	3	1	Rep. Michigan D. & F. Com. 1914, p. 167.

Eicholz, W.: The action of hydrogen peroxide on metals and its application for the disinfection of instruments under conditions in which sterilization by heat can not be employed.—Apoth.-Ztg. 1914, v. 29, p. 11.

Mathews and Curtis: The photochemical decomposition of hydrogen peroxide.—J. Phys. Chem. 1914, v. 18, p. 166–178, 521–537.

Walther: The use of hydrogen peroxide or of its preparations in the treatment of wounds.—Münch. med. Wchnschr. 1914, v. 61, p. 2185–2186.

For additional references on hydrogen peroxide see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.

AQUA ROSÆ FORTIOR.

U. S. P. IX: Required to be free from mustiness and mucilaginous growths. Should be neutral or only slightly acid with litmus.—J. Am. Pharm. Assoc. 1914, v. 3, p. 526, and Abstr. Prop. Changes, Part 3, 1914, p. 3.

ARGENTI NITRAS.

Stockinger, R.: Practically all silver nitrate becomes fairly dark on the surface and in some cases gives opalescent, faintly colored solution of halogen-free water after heating at 130°, for one hour, in covered porcelain crucible, as directed by the U. S. P., in preparation of deci-normal silver nitrate solution.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 156.

Gibbons and Getman: The potential of silver in nonaqueous solutions of silver nitrate. Report of experimental observations, accompanied by a chronological bibliography.—J. Am. Chem. Soc. 1914, v. 36, p. 1630–1655.

Apple, Franklin M.: A mixture of 1 part hard paraffin and 5 parts petrolatum was found to give the best results as an excipient for pills of silver nitrate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 231–232.

Lublinski, W.: Therapeutically silver nitrate is considered to be superior to all other silver salts.—Berl. klin. Wchnschr. 1914, v. 51, p. 1643; also J. Am. M. Assoc. 1914, v. 63, p. 1610.

ARGENTUM (COLLOIDAL SILVER).

Anon.: Under the title Argentum colloidale, with synonym collargol, it is proposed to add to the Ph. Norv. IV a colloidal silver containing a trace of albumin.—Pharm. Weekblad, 1914, v. 51, p. 72–73.

Bohrisch, P.: The Ph. Germ. should include a method of assay for determining the silver content of colloidal silver.—Apoth.-Ztg. 1914, v. 29, p. 901; also Pharm. Zentralh. 1914, v. 55, p. 892.

Schmiedel: Commercial samples of colloidal silver vary considerably in their silver content.—Südd. Apoth.-Ztg. 1914, v. 54, p. 364–365.

Long, S. H.: Some properties of electrolytically produced colloidal silver.—Kolloid-Ztschr. 1914, v. 14, p. 136–139.

Rebière, G.: A review of our knowledge relating to colloidal solutions and a general discussion of the properties of colloidal solutions.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 251, 314, 393.

Rupp, E.: The valuation of commercial preparations of colloidal silver involves the quantitative determination of silver content.—Südd. Apoth.-Ztg. 1914, v. 54, p. 302; also Apoth.-Ztg. 1914, v. 29, p. 723.

Warnecke, G.: The determination of the silver in silver proteinate and colloidal silver.—Apoth-Ztg. 1914, v. 29, p. 943–944.

Lehmann, F.: A simple method for the valuation of colloidal silver.—Arch. Pharm. 1914, v. 252, p. 9–12. See also Dankwortt, P. W., p. 69–76; also p. 497–501; and Korndörfer, A., Apoth.-Ztg. 1914, v. 29, p. 901.

Voigt, J.: A study on the distribution and the fate of colloidal silver in the mammalian body.—Biochem. Ztschr. 1914, v. 63, p. 409–424. See correction, p. 497. See also Therap. Monatsh. 1914, v. 28, p. 625–629.

Kollo, Konstantin: Ampoules of colloidal silver should be prepared in a sterile apparatus.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Crispin, Antonio M.: A case of argyrism following the use of collargol.—J. Am. M. Assoc. 1914, v. 62, p. 1394.

Crowell, Andrew J.: Collargol in pyelography, with a report of an interesting case and a note on a number of experiments on dogs.—J. Am. M. Assoc. 1914, v. 63, p. 1387–1389.

Eisendrath, Daniel E.: A preliminary note on the effect of injecting collargol into the renal pelvis.—J. Am. M. Assoc. 1914, v. 62, p. 1392–1393.

Vest, C. W.: Collargol should be used in pyelography only when absolutely necessary.—J. H. Hosp. Bull. 1914, v. 25, p. 74–77; also J. Am. M. Assoc. 1914, v. 62, p. 1120.

Rae, James: The clinical uses of colloidal metals.—Brit. M. J. 1914, v. 1, p. 1016.

Simpson and Hewlett: Experiments on the germicidal action of colloidal silver.—Lancet, 1914, v. 187, p. 1386.

ARGENTUM (SILVER PROTEINATE).

Anon.: Under the title argentum proteinicum it is proposed to add to the Ph. Norv. IV an albumin combination, containing from 8 to 9 per cent of silver.—Pharm. Weekblad, 1914, v. 51, p. 73–74.

Rupp, E.: The Ph. Germ. method for determining the silver content of protein compounds is not always satisfactory. A modified method is outlined.—Südd. Apoth.-Ztg. 1914, v. 54, p. 302; also Apoth.-Ztg. 1914, v. 29, p. 723.

Gehe & Co.: The Ph. Germ. V directions for determining foreign silver salts may lead to error, as even a good preparation is slightly soluble in alcohol.—Pharm. Zentralh. 1914, v. 55, p. 400.

Stöcker: The quantitative determination of silver in silver proteinate and similar preparations. Method designed to avoid incineration.—Apoth.-Ztg. 1914, v. 29, p. 344–345. See also Warnecke, G., p. 943–944.

Kroeber, Ludwig: Further observations on the composition of commercial preparations of silver proteinate. Eight samples were found to contain from 4.99 to 9.2 per cent of silver and from 6.97 to 12.03 per cent of moisture.—Apoth.-Ztg. 1914, v. 29, p. 713–715.

ARNICA.

Rippetoe, J. R.: Two samples of arnica flowers were found to contain 20.81 and 24.25 per cent of alcohol (49 per cent) extract and 7.78 and 6.80 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 436.

J. D. Riedel, A.-G.: Arnica contained from 6.2 to 8.6 per cent of ash, and from 24.9 to 28.2 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

U. S. P. IX: The tincture is to be made by percolation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 545, and Abstr. Prop. Changes, Part 3, 1914, p. 22.

Anselmino, O.: Report on a number of experiments to determine the relative specific gravity and extract content of tincture of arnica made from drug containing varying amounts of moisture.—Arb. Pharm. Inst. Univ. Berl. 1914, p. 28–29.

Editorial: Arnica is a good remedy to prescribe internally for those engaged in very violent physical exercise.—Ellingwood's Therap. 1914, v. 8, p. 196.

Smith, William A.: The use of arnica internally for ecchymosis. Report of one case in which the remedy "certainly did the job well."—Ellingwood's Therap. 1914, v. 8, p. 134.

ARSENI TRIOXIDUM.

News Note: The output of arsenic in the United States during 1913, was all in the form of white arsenic or arsenious oxide, commonly known as "arsenic," and amounted to about 2,375 short tons.—Oil, Paint & Drug Rep. 1914, v. 85, January 5, p. 58.

Fernau, Albert: An ash content of 0.2 per cent should be permitted in the Ph. Austr.—Ztschr. österr. Apoth.-Ver. 1914, v. 52, p. 227.

Stockinger, R.: Nine lots of arsenic trioxide, out of 15 examined, were slightly below the U. S. P. standard of 99.8 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 130.

U. S. P. IX: Rubric for solution of arsenious acid to require arsenous acid corresponding to not less than 0.75 and not more than 1.025 per cent of arsenic trioxide. Specific gravity about 1.025 at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 527, and Abstr. Prop. Changes, Part 3, 1914, p. 4.

Brown, Linwood A.: The determination of total arsenic in Fowler's solution and the determination of arsenous arsenic.—J. Am. Pharm. Assoc. 1914, v. 3, p. 645.

Simonot, M. E.: The principal methods for the integral destruction of organic matters in the toxicologic estimation of arsenic.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 101–115.

Dutcher and Steel: The elimination and retention of arsenic as determined by the Koch-Norton method.—J. Am. Chem. Soc. 1914, v. 36, p. 770–773.

Hellwig, Albert: Case of originally unsuspected arsenic poisoning.—Vrtljschr. ger. Med. 1914, v. 48, p. 226–232. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 51.

Harding, H. G. A.: The toleration of arsenic by the human system. Report of experimental observations.—Lancet, 1914, v. 186, p. 241.

Editorial: Arsenic eaters. The supposed beneficient results of arsenic eating.—Med. Rec. 1914, v. 86, p. 1011.

Dyer, Isadore: The use of arsenic and of preparations containing arsenic in the treatment of pellagra.—Merck's Arch. 1914, v. 16, p. 254–255.

ARSENIC (NONOFFICIAL COMPOUNDS).

Morgan, Gilbert T.: Organic derivatives of arsenic and antimony.—Pharm. J. 1914, v. 92, p. 537–540, 567–571.

Fischer, Emil: A new class of aliphatic arsenic combinations.—Ann. Chem. 1914, v. 403, p. 106–117.

Brunor, Emile: Notes on a new organic arsenic preparation; a review.—Am. Med. 1914, v. 20, p. 475–484.

Steinebach, Richard: A contribution to our knowledge of the disturbances of vision produced by atoxyl.—Berl. klin. Wchnschr. 1914, v. 51, p. 1116–1117. See also Makrocki, p. 1765–1766.

J. D. Riedel, A.-G.: A review of some of the recent literature relating to the use of various combinations of arsenic, including salvarsan and neosalvarsan.—Riedel's Berichte, 1914, p. 56–58.

For additional comments on organic combinations of arsenic see Zentralbl. Biochem. Biophys.; Zentralbl. exper. Med.; Index Med.; J. Am. M. Assoc.

Neosalvarsan.—Gutherie, Douglas J.: Note on a simple and rapid method of administering neosalvarsan.—Lancet, 1914, v. 186, p. 242. See also Geiringer, David: J. Am. M. Assoc. 1914, v. 62, p. 454.

Beeson, B. Barker: The initial dose of neosalvarsan in most cases should not exceed 0.45 gm. Distilled water is the best solvent. The intravenous method is one of choice.—J. Am. M. Assoc. 1914, v. 62, p. 510.

Kersten, H. E.: The intramuscular injection of neosalvarsan.—Münch. med. Wchnschr. 1914, v. 61, p. 1172–1173.

Abelin, J.: The behavior of neosalvarsan and salvarsan in the organism, with tables showing the results of observations.—Arch. exper. Path. u. Pharmakol. 1914, v. 75, p. 317–332.

Thomas and Moorhead: Severe cutaneous eruption following neosalvarsan. Report of two cases—J. Am. M. Assoc. 1914, v. 62, p. 608. See also Sheldon, J. H.: Lancet, 1914, v. 187, p. 96.

Gordon, Alfred: Unfavorable complications following an intradural injection of neosalvarsan.—J. Am. M. Assoc. 1914, v. 63, p. 1851.

Neumayer, Victor L.: Case of death following the injection of neosalvarsan.—Münch. med. Wchnschr. 1914, v. 61, p. 824–825.

Editorial: Comment on deaths following injections of neosalvarsan in Los Angeles.—J. Am. M. Assoc. 1914, v. 62, p. 935–936. See also p. 957–958.

Salvarsan.—Thoms, H.: The dispensing of salvarsan. Illustrated description of the method employed.—Ber. deutsch. pharm. Gesellsch. 1914, v. 24, p. 211–224.

Eichel, Henry: A self-retaining needle for administering salvarsan intravenously.—J. Am. M. Assoc. 1914, v. 63, p. 1029–1030.

Anon.: The salvarsan patents in England.—Brit. M. J. 1914, v. 2, p. 774–775.

McAdams, P. S.: The effect of "606" on the eye, with the report of seven cases of serious eye complications following its use.—Boston M. & S. J. 1914, v. 170, p. 308–312.

Stühmer, A.: Observations on the use of salvarsan serum.—Münch. med. Wchnschr. 1914, v. 61, p. 745–747. See also Eskuchen, Karl, p. 747–750.

Wechselmann, Wilhelm: The treatment of syphilis with salvarsan alone. A review.—Berl. klin. Wchnschr. 1914, v. 51, p. 533–538.

Jacobsohn, Leo: The salvarsan debate in the Berlin Medical Society.—Therap. Gegenw. 1914, v. 55, p. 176–177, 266–268.

Gennerich and others: A symposium on the use of salvarsan for the sixtieth birthday of Paul Ehrlich, March 14, 1914.—Münch. med. Wchnschr. 1914, v. 61, p. 513–522, 525, 530, 532, 539, 541.

Campbell, Harry: Intrathecal treatment with salvarsanized serum.—Lancet, 1914, v. 186, p. 1648–1649. See also Spencer, Gordon W., p. 1531–1533; and Monrad-Krohn, G. H., v. 187, p. 61–62.

Ayer, James B.: Salvarsanized serum "Swift-Ellis treatment") in syphilitic diseases of the central nervous system.—Boston M. & S. J. 1914, v. 170, p. 452–461. See also Litterer, William: J. Am. M. Assoc. 1914, v. 63, p. 1878; and Marinesco and Minea: Compt. rend. Soc. biol. 1914, v. 76, p. 672–674.

Buberl, Leonhard: The salvarsan treatment of anthrax carbuncle.—Münch. med. Wchnschr. 1914, v. 61, p. 1340–1341.

Kaempfer, Louis G.: Salvarsan in rhinoscleroma.—New York M. J. 1914, v. 99. p. 636–638.

Kurt, Kall: On the use of small doses of salvarsan in secondary anemia and in metabolic disturbances.—Münch. med. Wchnschr. 1914, v. 61, p. 1506–1508.

Glaser, F.: Salvarsan infusions in scarlet fever.—Deutsch. med. Wchnschr. 1914, v. 40, p. 1760–1761.

Kromayer: The failure in the salvarsan treatment of syphilis.—Deutsch. med. Wchnschr. 1914, v. 40, p. 1736.

Lube, F.: A case of death from acute arsenic poisoning after the injection of salvarsan in a nonluetic.—Deutsch. med. Wchnschr. 1914, v. 40, p. 946–949.

Luithlen, F.: The dangers of salvarsan therapy.—Therap. Monatsh. 1914, v. 28, p. 8–23.

Kohrs, Theodor: An additional case of death from acute encephalitis after the injection of salvarsan.—Münch. med Wchnschr. 1914, v. 61, p. 368–369.

Kanngiesser, Friedrich: A review of the reported untoward results from the use of salvarsan.—J. Pharm. Elsass-Lothr. 1914, v. 41, p. 24–27, and p. 107–110.

Wechselmann, Wilhelm: Critical comments on the pathogenesis of a death by salvarsan.—Münch. med. Wchnschr. 1914, v. 61, p. 1845–1846.

Schmitt, Artur: A review of the reported deaths from salvarsan and other causes, with particular consideration of the injury done by salvarsan.—Münch. med. Wchnschr. 1914, v. 61, p. 1337–1340, 1396–1399; also Pharm. Ztg. 1914, v. 29, p. 510.

Book Review: The encyclopedic volume by Victor Mentberger contains over 3,000 references to literature, and describes over 350 fatalities following the use of salvarsan and neosalvarsan.—New York M. J. 1914, v. 99, p. 906.

For additional references see Index Med.; Brit. M. J.; Lancet; Münch. med. Wchnschr.; and Berl. klin. Wchnschr.

ASAFETIDA.

U. S. P. IX: To yield not less than 60 per cent of alcohol soluble constituents. Ash not exceeding 15 per cent. Powdered asafetida should be 50 per cent soluble in alcohol. Ash not exceeding 30 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 363, and Abstr. Prop. Changes, Part 2, 1914, p. 5.

Anon.: The second supplement to the Ph. Ndl. IV permits 15 per cent of ash in asafetida.—Pharm. Weekblad, 1914, v. 51, p. 83; also Pharm. Post, 1914, v. 47, p. 125.

Noyes, C. R.: A large part of the asafetida as it appears on the market does not comply with the U. S. P. Probably this does no harm, provided you insist on knowing exactly what percentage of soluble gum resin you get.—Proc. Minnesota Pharm. Assoc. 1914, p. 191; also J. Am. Pharm. Assoc. 1914, v. 3, p. 855.

Seil, H. A.: The standard proposed by several European workers, based on the sulphur content of asafetida, is inadequate because it would countenance adulteration in some instances to the extent of 50 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 143.

Gehe & Co.: The quality of the available asafetida has materially improved, though the supply of the better quality of the drug in years has been insufficient.—Handelsbericht, 1914, p. 49.

Roberts, J. G.: The improvement noted in asafetida over a year ago is still in evidence, as most of the samples examined were of excellent quality.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 130.

Caesar & Loretz: The determination of resin content of resins and gum resins.—Jahres-Ber. 1914, p. 87–88.

Sudro, W. F.: The 26 samples of gum asafetida examined varied in their character; some were very good, but the majority were grossly adulterated. The 61 samples of powdered asafetida examined showed great variation in physical characters, alcohol soluble matter, ash, and in the formation of emulsions.—Rep. North Dakota F. Com. 1914, p. 32–33.

Table showing reported variation in ash content of asafetida.

Reporters.	Number of samples.	Ash content.		References.
		Minimum.	Maximum.	
Caesar & Loretz	4	8.30	44.7	Jahres-Ber. 1914, p. 37.
E'we, G. E	7	15	54.6	Proc. Pennsylvania Pharm. Assoc. 1914, p. 130.
Hankey, W. T	19	6.2	49	Proc. Ohio Pharm. Assoc. 1914, p. 47.
Jensen, H. R	14	9.8	42	Evans' An. Notes, 1914, p. 10.
Ladd, E. F	77	2.09	75.06	Bull. North Dakota Exper. Sta. F, Dept. 1914, v. 3, p. 81–83.
Maines, E. L		8.73	16.79	J. Am. Pharm. Assoc. 1914, v. 3, p. 424.
Mann, E. W	30	1.60	62.1	Ann. Rep. Southall Bros. & Barclay, 1914, p. 7–8.
Ziefle, Adolph	26	3.13	47.68	Am. Food J. 1914, v. 9, p. 480–481.

Congdon, Leon A.: Five samples of tincture of asafetida examined; four not standard.—Rep. Kansas Bd. Health, 1914, p. 100.

Shute, A. C.: When the quantity of milk secreted by young mothers is below normal, try asafetida, 5 drops every two hours.—Ellingwood's Therap. 1914, v. 8, p. 135.

ASPIDIUM.

U. S. P. IX: The "uncomminuted rhizome and stipes." Should be collected in the autumn and dried at a temperature not exceeding 70°. Ash not exceeding 3 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 364, and Abstr. Prop. Changes, part 2, 1914, p. 6.

Anon.: An illustrated description of male fern. *Aspidium filex-mas.*—Chem. & Drug. 1914, v. 84, p. 36.

Linke, H.: A method of assay for crude filicin should be included in the Ph. Germ.—Apoth.-Ztg. 1914, v. 29, p. 607, 628–630. See also Bohrisch, P.: Pharm. Zentralh. 1914, v. 55, p. 908; and Caesar & Loretz: Jahres-Ber. 1914, p. 23, 96–99.

Roberts, J. G.: Two of the three samples of male fern examined contained an undue proportion of old brownish fingers.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 146.

J. D. Riedel, A.-G.: Aspidium contained from 2.2 to 4.3 per cent of ash and from 9.4 to 9.7 per cent of extract soluble in ether.—Riedel's Berichte, 1914, p. 33.

Vanderkleed, C. E.: Reports four assays of male fern; from 6.85 to 10.12 per cent oleoresin; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

U. S. P. IX: Ether to replace acetone for making the oleoresin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 551, and Abstr. Prop. Changes, Part 3, 1914, p. 28.

Bohrisch, P.: The assay of extract of aspidium for crude filicin might be included in the Ph. Germ.—Apoth.-Ztg. 1914, v. 29, p. 901. See also Helch, Hans: Pharm. Post, 1914, v. 47, p. 572.

Caesar & Loretz: Eight samples of oleoresin of aspidium were found to contain from 24.85 to 35.58 per cent of crude filicin.—Jahres-Ber. 1914, p. 37.

Jensen, H. R.: In 7 of 10 samples of male fern extract, the filicic acid content varied from 15.6 to 25.3 per cent; the refractive index from 1.495 to 1.51.—Evans' An. Notes, 1914, p. 44.

Mann, E. W.: The filicin content of five samples of male fern extract varied from 20.4 to 27.7; specific gravity from 0.9985 to 1.030.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 17.

J. D. Riedel, A.-G.: Report on the examination of seven samples of capsules of oleoresin of aspidium. The crude filicin content was found to vary from 8.57 to 25.83 per cent. Only three of the samples contained more than 20 per cent of crude filicin.—Riedel's Berichte, 1914, p. 48.

Puckner, W. A.: A report recommending that filicic acid be deleted from N. N. R., as it evidently belongs to that large list of medicaments which have been tried and found wanting.—Rep. Council Pharm. Chem. 1914, p. 121.

Crossley-Holland, F. W.: Oleoresin of aspidium can best be exhibited in the form of a jelly made with gelatin and glycerin, sweetened with saccharin and flavored with oil of cinnamon.—Pharm. J. 1914, v. 93, p. 133; also Year-Book of Pharmacy, 1914, p. 377–379, and Drug. Circ. 1914, v. 57, p. 616.

Schotten, Ferd.: A fatal case of poisoning by oleoresin of aspidium followed by castor oil in a case of latent Addison's disease.—Münch. med. Wchnschr. 1914, v. 61, p. 2165–2168.

Hall, Maurice C.: Report of a necropsy on a man who died from an overdose of the oleoresin of male fern administered in amounts in excess of the usual dose and followed by castor oil.—J. Am. M. Assoc. 1914, v. 63, p. 242–243.

ASPIDOSPERMA.

U. S. P. IX: The dried bark without admixture of more than 2 per cent of wood and other foreign matter. A description of the transverse sections and the microscopic appearance of the drug is added; also of the powder.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1566, and Abstr. Prop. Changes, Part 6, 1914, p. 4.

Ewins, A. J.: The alkaloids of quebracho bark. I. The constitution of aspidospermine.—Proc. Chem. Soc. 1914, v. 30, p. 258–259; also Pharm. J. 1914, v. 93, p. 662.

Cow, D.: Quebrachine is by far the most toxic of the four alkaloids of quebracho that were investigated.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 341–356. For abstract see J. Am. M. Assoc. 1914, v. 62, p. 1122.

Fourneau and Page: The differentiation between yohimbine and quebrachine.—Bull. sc. pharmacol. 1914, v. 21, p. 7–16. See also Reutter, L.: Schweiz. Apoth.-Ztg. 1914, v. 52, p. 598–599.

U. S. P. IX: The fluid extract to be made by extracting with a mixture of glycerin 110, alcohol 670, and water 220.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1569, and Abstr. Prop. Changes, Part. 6, 1914, p. 7.

ATROPINA.

Labat, A.: Practical modification of the Guglielmo reaction for the detection of atropine.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 148–149.

Kebler, L. F.: Outline of method for the determination of atropine in compressed tablets.—J. Am. Pharm. Assoc, 1914, v. 3, p. 1088.

Marden and Elliott: In a study of distribution coefficients, it was found that the distribution ratio of atropine between water and chloroform was very small, and that three washings from 50 cc. of aqueous solution with 10 cc. portions of chloroform were quite sufficient for all practical purposes.—J. Ind. & Eng. Chem. 1914, v. 6, p. 930.

Kollo, Konstantin: Ampoules of atropine sulphate should be Tyndallized on three separate days.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Pilcher and Sollman: Quantitative studies on vagus stimulation and atropine.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 317–340.

Edsall and Means: The effect of strychnine, caffeine, atropine and camphor on the respiration and respiratory metabolism in normal human subjects.—Arch. Int. Med. 1914, v. 14, p. 897–910.

Mougeot, A.: Constant suppression of the oculo-cardiac reflex by atropine.—Compt. rend. Soc. biol. 1914, v. 76, p. 162–164. See also Petzetakis, p. 522–523; and Deleya, Paul, p. 631–632.

Sugimoto, T.: The action of atropine on the isolated uterus of the guinea pig.—Arch. exper. Path. u. Pharmakol. 1914, v. 74, p. 32.

Pletnew, D.: Atropine treatment of gastric disorders. Report of a number of cases, with some references to the literature.—Therap. Monatsh. 1914, v. 28, p. 30–37.

Pollard, Reginald: The atropine treatment of seasickness. The hypodermic injection of atropine sulphate has been found to be the most reliable.—Lancet, 1914, v. 186, p. 147.

Willberg, M. A.: The natural resistance of various animals to atropine.—Biochem. Ztschr. 1914, v. 66, p. 389–407.

For additional comments on atropine see Zentralbl. Biochem. u. Biophys.; Index Med.; and J. Am. M. Assoc.

AURANTII AMARI CORTEX.

U. S. P. IX: Description somewhat elaborated. Powdered bitter orange peel should be colored yellowish upon the addition of potassium hydroxide T. S. Ash not exceeding 7 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 365, and Abstr. Prop. Changes, Part 2, 1914, p. 7.

Linke, H.: Examination of bitter orange peel showed a loss of moisture at 100° of 10.2 per cent and on incineration showed the presence of 4.52 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 530.

Maines, E. L.: Dried orange peel, bitter, was found to contain from 3.28 to 4.74 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

J. D. Riedel, A.-G.: Orange rind contained from 5 to 5.6 per cent of ash, from 48 to 53.5 per cent of extract soluble in water, and from 38.1 to 45.1 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

AURANTII DULCIS CORTEX.

U. S. P. IX: The outer rind of the fresh, ripe fruit of *Citrus aurantium sinensis* Gallesio, recently separated by grating or paring.—J. Am. Pharm. Assoc. 1914, v. 3, p. 365, and Abstr. Prop. Changes, Part 2, 1914, p. 7.

Bradford, H. C.: Formula and directions for making extracts of orange for flavoring.—Drug. Circ. 1914, v. 58, p. 73.

Rowland, E. O.: Formula for glycerin preparations of lemon and orange.—Pharm. J. 1914, v. 92, p. 544–545.

AURI ET SODII CHLORIDUM.

Stockinger, R.: One sample of gold and sodium chloride tested 29.5 per cent metallic gold, instead of 30 per cent, but answered all other U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 139.

BALSAMUM PERUVIANUM.

Anon.: The fragrant balsam imported into the United States as balsam of Peru is produced by a tree known botanically as *Myroxylon pereirae* Klotzsch. This tree is a native of the Republic of San Salvador, on the Pacific coast of Central America.—Montreal Pharm. J. 1914, v. 25, p. 77–78. See also Spatula, 1914, v. 20, p. 176: and Schimmel & Co.: Semi-Ann. Rep. April, 1914, p. 107.

Alsberg, C. L.: A method was developed to distinguish the genuine Peru balsam from imitations and from mixtures.—Am. Food J. 1914, v. 9, p. 21. See also Seil, H. A.: J. Am. Pharm. Assoc. 1914, v. 3, p. 144.

Fernau, Albert: The pharmacopœia should include tests for perugen and similar compositions containing balsam of tolu.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 228. See also Herzog, J.: Apoth.—Ztg. 1914, v. 29, p. 310.

Enz, Karl: Factitious and true balsam of Peru; a comparison of the behavior of the products with alcohol, chloroform, petroleum ether, and nitric acid.—Südd. Apoth.-Ztg. 1914, v. 54, p. 94–95.

Caesar & Loretz: The methods of testing balsam of Peru and the requirements of the several pharmacopœias.—Jahres-Ber. 1914, p. 51.

Gehre & Co.: The differentiation between factitious and genuine balsam of Peru offers certain difficulties. A number of qualitative tests are described.—Handelsbericht, 1914, p. 50; also Südd. Apoth.-Ztg. 1914, v. 54, p. 239.

Rupp, E.: Outline of method for determining the cinnamein content of balsam of Peru; also the saponification number.—Apoth.-Ztg. 1914, v. 28, p. 723; also Süd. Apoth.-Ztg. 1914, v. 54, p. 302.

Rosenthaler, L.: The optical activity of cinnamein, with a table showing the comparative behavior of a number of samples of true and factitious balsam of Peru.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 273–275.

Sortell, A. W.: On the composition of the volatile oil from balsam of Peru.—Ber. deutsch. pharm. Gesellsch. 1914, v. 24, p. 233–234. See also Dieterich, Karl, p. 376–383; and Schimmel & Co.: Semi-Ann. Rep. 1914, April, p. 80.

Mann, E. W.: Four samples of Peruvian balsam were examined; in two the proportion of cinnamein present was rather low.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 21.

Hankey, William T.: of eight samples of balsam of Peru examined, one contained rosin, turpentine, storax, and fatty oils. The cinnamein content varied from 57.48 to 63.24 per cent, and the saponification value of the cinnamein varied from 240.2 to 262.1.—Proc. Ohio Pharm. Assoc. 1914, p. 53.

Jensen, H. R. Four samples of Peru balsam of good quality gave: acid value, 56 to 67.2; saponification value, 224.9 to 243.6; iodine value, 42.5 to 54.7; specific gravity, 1.155 to 1.1665; refractive index, 1.5948 to 1.5983.—Evans' An. Notes, 1914, p. 53.

BALSAMUM TOLUTANUM.

Anon.: The second supplement to the Ph. Ndl. IV requires that balsam of tolu be partially soluble in carbon disulphide, and that, on evaporating the solution, the residue be crystalline.—Pharm. Weekblad, 1914, v. 51, p. 83.

Rupp, E.: Outline of method for determining the saponification number of balsam of tolu.—Apoth.-Ztg., 1914, v. 29, p. 723; also Südd. Apoth.-Ztg., 1914, v. 54, p. 302.

E'we, G. E.: Twelve lots of tolu balsam ranged from 96.7 to 99.9 per cent soluble in alcohol and were otherwise satisfactory.—Proc. Pennsylvania Pharm. Assoc., 1914, p. 159.

Baker, W. L.: One sample of balsam of tolu was found to be deficient in alcohol-soluble content; another sample contained rosin.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Mann, E. W.: A large number of samples have been assayed for free and combined aromatic acids. Eighteen samples were found to contain from 70.8 to 94.6 per cent material soluble in alcohol (90 per cent), and from 7.1 to 10.6 per cent free balsamic acid (calculated as benzoic acid).—Ann Rep. Southall Bros. & Barclay, 1914, p. 25.

Jensen, H. R.: Thirteen samples of balsam of tolu showed: acid value, 112 to 124.4; saponification value, 182.8 to 205.1; ester value, 68.6 to 88.9.—Evans' An. Notes, 1914, p. 67.

Reum, Arthur: A formula for making sirup of tolu, using a 40 per cent tincture and magnesim carbonate as the absorbing powder.—Pacific Pharm. 1914, v. 7, p. 262.

BELLADONNÆ FOLIA.

U. S. P. IX: The dried leaves and tops, with not more than 10 per cent of stems. Ash not exceeding 20 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 365, and Abstr. Prop. Changes, Part 2, 1914, p. 7.

Sievers, A. F.: The possibility of increasing the alkaloidal content of belladona plants through selection.—J. Am. Pharm. Assoc. 1914, v. 3, p. 98–103, and p. 492–495; also Am. J. Pharm. 1914, v. 86, p. 97–112, and p. 483–505.

Miller, F. A.: Report of propagation experiments with belladonna.—Bull. Torrey Bot. Club, 1914, v. 41, p. 118; also Lilly Sci. Bull. 1914, Ser. 1, p. 129, and J. Am. Pharm. Assoc. 1914, v. 3, p. 310.

Miller and Reed: A study of American grown belladonna.—J. Ind. & Eng. Chem. 1914, v. 6, p. 25–26; also Lilly Sci. Bull. 1914, Ser. 1, p. 169–172.

Newcomb, Edwin L.: Belladonna and hyoscyamus. A report on cultivation experiments, with a number of illustrations.—Am. J. Pharm. 1914, v. 86, p. 531–542. See also Haynes and Newcomb: Merck's Rep. 1914, v. 23, p. 11–12.

Hooper, David: Belladonna grows in the western Himalayas, from 6,000 to 12,000 feet; from Simla to Kashmir.—Montreal Pharm. J. 1914, v. 25, p. 3.

Lloyd, John Uri: Characteristics and constituents of belladonna.—Eclectic M. J. 1914, v. 74, p. 228.

Allen and Deane: The adulteration of belladonna leaves, with illustrations showing the structural characteristics of ailanthus, phytolacca, and scopola.—Pharm. J. 1914, v. 92, p. 121–123; also Year-Book of Pharmacy, 1914, p. 337–343.

Sayre, L. E.: The leaves of *Phytolacca decandra* (poke), which have often been used to adulterate belladonna, may be distinguished by the presence of bundles of needle-shaped crystals.—Proc. Kansas Pharm. Assoc. 1914, p. 22.

Holmes, E. M.: Both ailanthus and phytolacca occur as adulterants of belladonna. Indeed no sample of dried belladonna leaves ought to be passed into stock at the present time without careful examination.—Pharm. J. 1914, v. 92, p. 214.

Lilly, J. K.: Gross adulteration of belladonna leaves to the amount of from 50 to 75 per cent with scopola is frequent.—Proc. N. W. D. A. 1914, p. 262; also Oil, Paint & Drug. Rep. 1914, v. 86, September 30, p. 34.

Neal, P. C.: Of 18 samples of belladonna leaves examined, 16 were accepted and 2 rejected.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

Lewis, S. Judd: The leaves of belladonna contained 10.95 per cent moisture, and yielded 16.17 per cent of ash, calculated on the dry drug.—Pharm. J. 1914, v. 92, p. 128; also Year-Book of Pharmacy, 1914, p. 365–366.

J. D. Riedel, A.-G.: Belladonna leaves contained from 11 to 14.8 per cent of ash, from 30.1 to 35.2 per cent of extract soluble in water, and from 25.9 to 34 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

Maines, E. L.: Belladonna leaves were found to contain 6.25 to 13.30 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Fernau, Albert: A minimum content of alkaloid for belladonna leaves should be included in the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 253.

Caesar & Loretz: The valuation of belladonna, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 81–83.

Dichgans, H.: A comparative study of the several official assay processes for belladonna folia.—Apoth.-Ztg. 1914, v. 29, p. 441, 452, 462. See also Caesar & Loretz: Jahres-Ber. 1914, p. 24–25.

U. S. P. IX: Method of assay as under belladonna root.—J. Am. Pharm. Assoc. 1914, v. 3, p. 987, and Abstr. Prop. Changes, Part 4, 1914, p. 4.

Ferencz and Dávid: Report on comparative assays of extract of belladonna by means of the new silico-tungstic acid method and the method official in the Ph. Hung. III.—Pharm. Post, 1914, v. 47, p. 562.

Rusby, H. H.: A sample of belladonna leaf that contained 0.099 per cent of alkaloid probably was a sophistication and may have consisted of henbane.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1290.

Anselmino, O.: Observations on the alkaloid content of belladonna leaves and the relation of the alkaloid content to ash content and moisture content.—Arb. Pharm. Inst. Univ. Berl. 1914, p. 36–38.

Table showing reported variation in alkaloidal content of belladonna leaves.

Reporters.	Number of samples.	Alkaloidal principles.		References.
		Minimum.	Maximum.	
Caesar & Loretz	6	0.203	0.449	Jahres-Ber. 1914, p. 38.
Hankey, William T.	17	.113	.487	Proc. Ohio Pharm. Assoc. 1914, p. 46.
Patch, E. L.	5	.03	.35	J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.
Roberts, J. G	9	.19	.38	Proc. Pennsylvania Pharm. Assoc. 1914, p. 131.
Vanderkleed, C. E.	16	.364	.608	Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

U. S. P. IX: To require that 1 gm. of the extract and of the powdered extract represent 4 gm. of belladonna leaves and yield not less than 1.18 nor more than 1.32 per cent of the mydriatic alkaloids of belladonna leaves.—J. Am. Pharm. Assoc. 1914, v. 3, p. 533, 987, and Abstr. Prop. Changes, Part 3, 1914, p. 10, 11, and Part 4, p. 4.

Patterson and Lentz: Report of a study on the manufacture and assay of fluid extract of belladonna by the official process.—Proc. Maryland Pharm. Assoc. 1914, p. 103–106.

Brown, Lucius P.: Of three samples of fluid extract of belladonna examined, two were found to be illegal.—Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.

U. S. P. IX: To require that 100 cc. of the tincture yield not less than 0.03 nor more than 0.033 gm. of the mydriatic alkaloids from belladonna leaves.—J. Am. Pharm. Assoc. 1914, v. 3, p. 987, and Abstr. Prop. Changes, Part 4, 1914, p. 4.

Table showing some of the analytical results reported for tincture of belladona.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, Lucius P.	8	4	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1 p. 27.
Stadtmueller, F. H.	40	25	Rep. Connecticut D. & F. Com., 1914, p. 15.
Street, J. P.	40	23	Rep. Connecticut Agric. Exper. Sta., 1914, p. 335.
Todd, A. R.	7	5	Rep. Michigan D. & F. Com., 1914, p. 176.
Todd, A. R.	6	5	Bull. Michigan D. & F. Dept., 1914, January-February, p. 17.
Ziefle, Adolph	71	71	Rep. North Dakota Agric. Exper. Sta., 1912, 1914, p. 157–158.

U. S. P., IX: The hydrous wool fat in ointment of belladonna is increased from 20 gm. to 30 gm.; 10 gm. less of benzoinated lard being taken.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1578, and Abstr. Prop. Changes, Part 6, 1914, p. 16.

Williams, Ed. E.: A water bath can be profitably utilized in the manufacture of ointment of belladonna.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Curry, Gordon L.: Notwithstanding the superior finish of the machine-made belladonna plaster, no better example of the qualifications of a practical pharmacist can be submitted to a physician than a nicely spread plaster on chamois or plaster skin.—Proc. Kentucky Pharm. Assoc. 1914, p. 57.

Street, John Phillips: Seven samples of belladonna plaster ranged from 0.32 to 0.44 per cent of mydriatic alkaloids. Three were somewhat below the minimum U. S. P. standard.—Rep. Connecticut Agric. Exper. Sta. 1914, p. 248.

Willberg, W. A.: The natural resistance of various animals to atrophine.—Biochem. Ztschr. 1914, v. 66, p. 389–407.

Braun, Israel: Among the group of remedies consisting of belladonna, hyoscyamus, stramonium, and lobelia, the first named is the most serviceable in the treatment of bronchial asthma.—Merck's Arch. 1914, v. 16, p. 106.

Editorial: Belladonna exalts the action of the heart, increases the strength of the beat, and promotes freedom of the capillary circulation.—Ellingwood's Therap. 1914, v. 8, p. 64.

Nathan, Sidney: A case of belladonna poisoning, in which a belladonna plaster had been placed on a raw surface caused by a mustard leaf.—Brit. M. J. 1914, v. 1, p. 965.

BELLADONNÆ RADIX.

U. S. P. IX: The dried root with not more than 10 per cent of its stem bases. Ash not exceeding 7 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 366, and Abstr. Prop. Changes, Part 2, 1914, p. 8.

Lewis, S. Judd: The root of belladonna contained 11.72 per cent moisture and yielded 6.48 per cent of ash calculated on the dry drug.—Pharm. J. 1914, v. 92, p. 128; also Chem. & Drug. 1914, v. 85, p. 169.

Caesar and Loretz: The valuation of belladonna root, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 93–94.

Roberts, J. G.: As usual, all of the samples of belladonna root examined were of standard strength and quality. Results ranging from 0.52 to 0.67 per cent of mydriatic alkaloids were obtained.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 131.

Mann, E. W.: Considerable variation in alkaloid strength of belladonna root has been experienced. Thirteen samples tested from 0.22 to 0.56 per cent of alkaloids.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 9.

Vanderkleed, C. E.: Reports 22 assays of belladonna root; found to vary from 0.410 to 0.700; 19 above and 3 below standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Jensen, H. R.: Fourteen samples of foreign belladonna root yielded from 0.2 to 0.49 per cent of hyoscyamine by the Keller ether extraction method.—Evans' An. Notes, 1914, p. 13.

BENZALDEHYDUM.

Rupp, E.: Outline of method for determining halogens in benzaldehyde.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 302.

Dodge, Francis D.: The detection of chlorine in benzaldehyde and oil of bitter almond by a modification of the combustion process.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1665–1666.

Mann, E. W.: Four samples of synthetic benzaldehyde had a specific gravity of from 1.050 to 1.052 and refractive index of from 1.5450 to 1.5470.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 27.

Purvis, J. E.: The absorption spectra of the vapors and solutions of various derivatives of benzaldehyde.—J. Chem. Soc. Lond. 1914, v. 105, p. 2482–2500.

Erlenmeyer, Emil: Some additional remarks on the production of lævo rotatory benzaldehyde.—Biochem. Ztschr. 1914, v. 66, p. 509–511.

Ishizaka, N.: On the condensation of benzaldehyde and isoamylamin.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 2456–2460.

For additional references on benzaldehyde see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.

BENZINUM.

Anon.: Under the title aether petrolei, the second supplement to the Ph. Ndl. IV includes benzin, with a boiling point of from 65 to 80, as a reagent.—Pharm. Weekblad, 1914, v. 51, p. 86.

Fernau, Albert: The boiling point of benzin should not exceed 60°.—Ztsch Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 228.

Dück: A sample of petroleum benzin was found to be contaminated with heavier products. Specific gravity was 0.743 while a good specimen should vary from 0.680 to 0.700.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 235.

Anon.: Accidents and disasters due to the use of benzin in Germany.—Südd. Apoth.-Ztg. 1914, v. 54, p. 101. See also Pharm. Zentralh. 1914, v. 55, p. 301; and Chem. Tr. J. 1914, v. 54, p. 258.

Jaffé, Rudolf: A review of nine fatal cases of benzin poisoning on record in the literature, with a report on two additional cases, and experiments on guinea pigs and rats.—Münch. med. Wchnschr. 1914, v. 61, p. 175–180. Also abstract: J. Am. M. Assoc. 1914, v. 62, p. 818.

Stephens, G. A.: Recommends petrol or gasoline as a scalp cleanser, especially when the dandruff is excessive.—(Dublin J. Med. Sc. 1912, v. 3, No. 504) J. Am. M. Assoc. 1914, v. 62, p. 240.

BENZOINUM.

U. S. P. IX: The drug known in commerce as Sumatra benzoin and Siam benzoin; described separately. Sumatra benzoin, ash not exceeding 2.5 per cent. Siam benzoin, ash not exceeding 2 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 366, and Abstr. Prop. Changes, Part 2, 1914, p. 8.

Gehe & Co.: The source of the benzoin obtained from western Asia, which was formerly considered to be *Styrax benzoin* Dryander, should, according to Hartwich, be *Styrax benzoides.* The drug coming from farther India is probably obtained from *Styrax tonkinensis.*—Handelsbericht, 1914, p. 51.

Rordorf, Hart: Some further contributions on the origin, chemistry, and properties of Siam benzoin.—Schweiz. Apoth.-Ztg. 1914,

v. 52, p. 701–703, 713–717. See also Pharm. Zentralh. 1914, v. 55, p. 355–356.

Noyes, C. R.: Benzoin should be almost wholly soluble in alcohol. A large part of the drug as it appears on the market does not comply with these requirements.—J. Am. Pharm. Assoc. 1914, v. 3, p. 855; also Proc. Minnesota Pharm. Assoc. 1914, p. 191.

Caesar & Loretz: The determination of resin content of resins and gum resins.—Jahres-Ber. 1914, p. 87–88.

Cocking and Kettle: The analytical characters of benzoin.—Pharm. J. 1914, v. 92, p. 125–126; also Year-Book of Pharmacy, 1914, p. 357–360, and Perf. & Ess. Oil Rec. 1914, v. 5, p. 331.

Reinitzer, Friedrich: Examination of Siam benzoin. A method for the production of a new crystalline constituent of Siam benzoin.—Arch. Pharm. 1914, v. 252, p. 341–349.

Baker, W. L.: Three different lots of benzoin were rejected, all deficient in alcohol-soluble contents.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Scoville, W. L.: Reports that six lots or benzoin varied from 77 to 94 per cent alcohol soluble matter.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Glickman, L. H.: The 11 lots of benzoin examined ranged from 59 to 81.6 per cent of alcohol-soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 131.

Mann, E. W.: The Ph. Brit. 15 per cent limit for matter insoluble in alcohol appears to be commercially impossible.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 9.

Jensen, H. R.: A sample of Sumatra benzoin was 14.4 per cent insoluble in 90 per cent alcohol; acid value, 119, saponification value, 211.2.—Evans' An. Notes, 1914, p. 13.

Lefeldt, M.: The Ph. Germ. V should include a requirement for alcohol soluble constituents in tincture of benzoin.—Pharm. Ztg. 1914, v. 59, p. 43.

Reum, Arthur: In making compound tincture of benzoin, it has been found advisable to place all of the ingredients directly into a wide-mouthed bottle, using 75 per cent of the alcohol necessary, and macerating for three days or longer, with occasional shaking.—Pacific Pharm. 1914, v. 7, p. 310.

Editorial: Mathematically tincture of benzoin should contain from 76.33 to 81.74 per cent of alcohol.—Pacific Pharm. 1915, v. 8, p. 252.

Brown, Charles H.: Benzoin, glycerin, and rose water lotion as a remedy for chapped hands.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 354.

Anon.: Directions for making a satisfactory lotion of rose water, glycerin, and tincture of benzoin.—Drug. Circ. 1914, v. 57, p. 725.

See also Hensel, Samuel T.: Rocky Mountain Druggist, 1914, v. 28, December, p. 14–15.

BENZOL.

Anon.: There are now upward of 70 German makers of benzol who produce an article of uniform quality.—J. Ind. & Eng. Chem. 1914, v. 6, p. 259.

Richards and Shipley: The freezing point of benzene as a fixed point in thermometry.—J. Am. Chem. Soc. 1914, v. 36, p. 1825–1832; also Chem. News, 1914, v. 110, p. 187–189.

Schenk, Konrad: The determination of sulphur in commercial benzol.—Chem.-Ztg. 1914, v. 38, p. 83–84.

Jensen, H. R.: One sample of benzol, with specific gravity 0.880, 90 per cent of which distilled up to 100°, gave a decided thiophene reaction.—Evans' An. Notes, 1914, p. 13.

Flürscheim, Bernard: Constitution of the benzene nucleus with reference to the phenomenon of di-substitution.—Chem. News, 1914, v. 110, p. 1–2.

Schiff, F.: The influence of benzol on the active anaphylaxis of guinea pigs.—Ztschr. Immun. u. exper. Therap. 1914, v. 23, p. 61–65.

Benians, T. H. C.: The resistance of various bacteria to the disinfecting action of toluol, and the allied bodies, benzol and xylol.—Ztschr. Chemotherap. 1914, v. 2, p. 28–49.

Sappington and Pearson: A report of three cases, with a metabolism study of acute leukemia.—J. Am. M. Assoc. 1914, v. 63, p. 143–146.

Boruttau and Stadelmann: A contribution on the chemical basis for the benzol treatment of leukemia.—Biochem. Ztschr. 1914, v. 61, p. 372–386. See also Editorial: Therap. Gaz. 1914, v. 38, p. 398.

Møller, H. C. V.: Benzol in leukemia. Thirty-five cases of lukemia in women between 39 and 62 are reported.—(Hospitalstidende, Copenhagen, v. 42, July 1, No. 26) J. Am. M. Assoc. 1914, v. 63, p. 440.

A book review calls attention to a volume by Laurence Selling on the action of benzol (benzene, C_6H_6) on the blood-making organs.—J. Am. M. Assoc. 1914, v. 62, p. 1984.

For additional comments on benzol see Index. Med.; J. Am. M. Assoc.; Zentralbl. Biochem. Biophys.; Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.

BENZOSULPHINIDUM.

Fernau, Albert: The conversion of benzosulphinide into salicylic acid by means of potassium hydroxide does not succeed at higher temperatures.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 263.

E'we, G. E.: All of the lots of saccharin examined had melting points higher than the U. S. P. requirement of 219° to 220°. One lot melted at 225°, but was otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 155.

Jensen, H. R.: Three samples of saccharin from different sources varied in strength from 69.2 to 99.8 per cent; from 165° to 222°.—Evans' An. Notes, 1914, p. 57.

Marden, J. W.: The determination of saccharin. A study of the methods of extraction by means of immiscible solvents from the point of view of the distribution coefficient.—J. Ind. & Eng. Chem. 1914, v. 6, p. 318–320.

Pazienti, U.: On the determination of saccharin and of the sodium salt of saccharin.—Ann. Chim. applicata, 1914, v. 2, p. 290–294.

Condelli, Sebastiano: On the detection and determination of saccharin in mixtures.—Boll. chim.-farm. 1914, v. 53, p. 97–102.

Jackson, Cook, and Strickland: In Rhode Island, the use of saccharin or its allied products, the use of dulcin, or its allied products, or the use of any other artificial sweetener in all food or food materials is prohibited.—Rep. Rhode Island F. & D. Com. 1914, p. 5.

Caspari, Chas. E.: Some truths about saccharin and an argument for its more widespread use.—Am. Food J. 1914, v. 9, p. 517–519.

Wagner, T. B.: The use of saccharin in foods as a substitute for sugar.—J. Ind. & Eng. Chem. 1914, v. 6, p. 73. See also Editorial: Pract. Drug. 1914, v. 32, p. 534.

Dafert, F. W.: The use of saccharin in the imitation or adulteration of foods.—Arch. Chem. u. Micros. 1914, v. 7, p. 44–47.

Editorial: A review of some of the conflicting opinions regarding the use of saccharin in foods.—Pharm. Era, 1914, v. 47, p. 357.

Roy, Reuben F.: Text, with decision, of Supreme Court of Missouri on the use of saccharin in nonalcoholic drinks.—Am. Food J. 1914, v. 9, p. 305.

Queeny, John F.: Presents a resolution requesting that the Bureau of Chemistry ruling affecting saccharin be changed so as to be in accordance with the findings of the referee board.—Proc. N. A. M. M. P. 1914, p. 89–90.

Anon.: Saccharin has a legitimate place as a sweetening agent for certain pharmaceutical preparations.—Am. Druggist, 1914, v. 62, p. 96; also Phys. Drug. News, 1914, v. 8, p. 137.

BERBERIS.

Anon.: An illustrated description of berberis, the structural characteristics of *Berberis aquifolium*, and the use to which the drug has been put.—Southern Pharm. J. 1914, v. 6, p. 309–311.

Rippetoe, J. R.: One sample of berberis was found to contain 8.15 per cent of alcohol (49 per cent) extract, and 2.15 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 436.

Maines, E. L.: Berberis was found to contain 2.07 to 3.20 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Richter, Erw.: Berberine and its determination. The constitution and properties of berberine, and its determination in preparations.—Arch. Pharm. 1914, v. 252, p. 192–205.

Thorburn, A. D.: Two samples of fluid extract of berberis were found to be 60 and 67 per cent below standard.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 212.

BETANAPHTHOL.

Katayama and Ikeda: On a new color reaction of beta-naphthol. A chloroform solution of beta-naphthol gives with concentrated potassium hydroxide a blue color.—J. Pharm. Soc. Japan, 1914, October, p. 1142.

Bianchini, Gino: On the incompatibility existing between salol, sulphonal and beta naphthol.—Atti accad. Lincei, 1914, v. 23, p. 608–615.

BISMUTHI SUBCARBONAS.

Treubert and Vanino: A contribution to the controversy over the existence of bismuthyl.—Ztschr. Anal. Chem. 1914, v. 53, p. 564–568.

Mann, E. W.: The Ph. Brit. V has fixed the fairly stringent maximum for arsenic in bismuth salts of 2 parts per million. With very few exceptions the official salts examined during the two years complied with this standard.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 43.

Brandt, L.: Observations on the quantitative separation of arsenic and bismuth.—Chem.-Ztg. 1914, v. 38, p. 474.

Hill, C. A.: Of 247 samples of bismuth carbonate examined during the years 1910 to 1913, inclusive, the nitrate, calculated as bismuth subnitrate, was found to vary from 0 to 6 per cent. The arsenic content varied from 0 to 2.4 parts per million.—Chem. & Drug. 1914, v. 85, p. 18, 21.

Issraeliantz, L.: Observations on the action of astringents on the gastric secretion especially on pepsin adsorption.—Therap. Monatsh. 1914, v. 28, p. 117–123.

BISMUTHI SUBGALLAS.

E'we, G. E.: Two lots of bismuth subgallate examined contained slightly more water than the U. S. P. allowance of 7 per cent, testing 7.12 and 7.52 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 131.

Department of Agriculture: Reports that dermatol contained 20 per cent of sulphur.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287; also Am. Druggist, 1914, v. 62, p. 17.

Newman, E. A. R.: Bismuth subgallate gauze in the treatment of wounds.—Brit. M. J. 1914, v. 2, p. 837.

BISMUTHI SUBNITRAS.

Enz, Karl: The official Ph. Germ. V. test for lead is sufficiently delicate. In the pharmacopœial test for arsenic with tin chloride, daylight must be guarded against; otherwise the results may be misleading.—Südd. Apoth.-Ztg. 1914, v. 54, p. 470–471.

Guérin, G.: On the detection of lead in bismuth subnitrate.—J. pharm. et chim. 1914, v. 10, p. 22–23.

E'we, G. E.: One lot of bismuth subnitrate examined was discolored, probably by hydrogen sulphide in the air, since it was supplied in a paper bag.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 131.

Hill, C. A.: Of 93 samples of bismuth subnitrate examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0 to 1.6 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

Kebler, L. F.: Outline of method for the determination of bismuth subnitrate in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1088.

Congdon, Leon A.: Three samples of bismuth tablets; one not standard.—Rep. Kansas Bd. Health, 1914, p. 100.

Zadek, J.: On the causes of nitrite poisoning by bismuth subnitrate.—Ztschr. exper. Path. u. Therap. 1914, v. 15, p. 498–516.

Beck, Emil G.: The prevention of bismuth poisoning in hip-joint disease.—J. Am. M. Assoc. 1914, v. 62, p. 231.

Sandwith, F. M.: The value of bismuth subnitrate or salicylate in the treatment of dysentery.—Lancet, 1914, v. 187, p. 735.

BISMUTHI SUBSALICYLAS.

Hill, C. A.: Of 49 samples of bismuth salicylate examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0 to 8 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

BROMUM.

Kubierschky, K.: Apparatus for the production of bromine; illustrated.—(Chem. Apparatur, 1914, v. 1, p. 2–5) J. Soc. Chem. Ind. 1914, v. 33, p. 135.

Linke, H.: The Ph. Germ. V specific gravity for bromine, about 3.1, is evidently calculated at 0°. At the usual temperature of 15°, the specific gravity ranged from 2.97 to 2.99.—Apoth.-Ztg. 1914, v. 29, p. 489.

Cole, Harriet I.: The estimation of iodine and bromine in haloid salts by means of telluric acid.—Am. J. Sci. 1914, v. 188, p. 537.

Carnot and Coirre: Localization of bromine after its therapeutic administration.—Compt. rend. Soc. biol. 1914, v. 76, p. 641; also Labat, A.: Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 355–362.

BUCHU.

U. S. P. IX: The dried leaves of *Borosma betulina*, known in commerce as short buchu, or of *Barosma serratifolia*, known in commerce as long buchu, described elaborately. Ash not exceeding 4 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 367, and Abstr. Prop. Changes, Part 2, 1914, p. 9.

Anon.: Round buchu (*Barosma betulina*) is alone recognized in the Ph. Brit. and the revision authority has decided to again exclude the long variety.—Brit. & Col. Drug. 1914, v. 65, p. 513. See also Editorial: Drug. Circ. 1914, v. 57, p. 604.

Anon.: Illustrated description of buchu; the structural appearance of short and of long buchu leaves and of the flowering branches of the shrubs yielding them; also description of the structural characteristics of the drugs.—Southern Pharm. J. 1914, v. 6, p. 344–345.

Editorial: The exports of buchu from South America in 1908 were 243,742 pounds, in 1912, 223,000 pounds, in 1913, 163,000 pounds, and in 1914 it is believed will show a record reduction, viz, to 75,000 pounds.—Brit. & Col. Drug. 1914, v. 65, p. 491–492. See also Editorial: Oil, Paint & Drug Rep. 1914, v. 85, June 1, p. 9.

Schimmel & Co.: The buchu plant appears to be rather difficult of cultivation; the cuttings do not take root readily; they thrive best in very sandy soil.—Semi-Ann. Rep. April, 1914, p. 33.

Lilly, J. K.: Slight admixture of species of buchu not answering to the description of the U. S. P. has been noted.—Proc. N. W. D. A. 1914, p. 262; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Editorial: Note on a new kind of buchu. The leaves correspond very closely with the leaves of *Barosma scoparia* E. and Z.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 373–374.

Anon.: The character of the volatile oil from the leaves of *Barosma venusta*.—Perf. & Ess. Oil. Rec. 1914, v. 5, p. 428.

Rippetoe, J. R.: Ten samples of short buchu contained from 3.70 to 5.06 per cent of ash and from 3.46 to 21.79 per cent of stem. Three samples of long buchu were found to contain from 19.56 to 24.90 per cent of alcohol (73 per cent) extract, from 4.20 to 5.22 per cent of ash, and from 8.90 to 15.18 per cent of stems.—Am. J. Pharm. 1914, v. 86, p. 436–437.

Maines, E. L.: Long buchu was found to contain from 3.84 to 4.60 per cent of ash. Short buchu was found to contain from 4.75 to 5.24 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Baker, W. L.: A large percentage of stems were found to be present in a sample of short buchu.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Rusby, H. H.: Ten bales of buchu were found to consist largely of chopped stems and branches. The importer was allowed to remove the stems, but he had only 4½ bales of material left.—Proc. New York Pharm. Assoc. 1914, p. 117.

CAFFEINA.

Fendler and Stüber: The determination of caffeine in coffee. A comparison of the several methods that have been proposed.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 28, p. 9–20; also Südd. Apoth.-Ztg. 1914, v. 54, p. 535–536.

Marden, J. W.: The determination of caffeine. A study of the methods for extraction by means of immiscible solvents from the point of view of the distribution of coefficients.—J. Ind. & Eng. Chem. 1914, v. 6, p. 320.

Wagenaar, M.: Microchemical reactions for caffeine, theobromine, theophylline, and their derivatives by sublimation.—Pharm. Weekblad, 1914, v. 51, p. 23–24.

E'we and Vanderkleed: Volatility of caffeine and of acetanilide in a current of steam; 0.8 per cent of the caffeine was recovered from the distillate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1683.

Kebler, L. F.: Outline of method for the determination of caffeine in compound tablets containing acetanilide.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1080.

Knud, J. A. Secher: Report of observations on the action of caffeine on striated muscle fiber.—Arch. exper. Path. u. Pharmakol. 1914, v. 77, p. 83–121.

Lucas, William Palmer: Studies in cardiac stimulants, including drugs of the strychnine and caffeine group.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 54–83.

Newburgh, L. H.: Therapy of cardiovascular disturbances. Caffeine did not stimulate the cardiovascular apparatus in any of the conditions studied.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 84–91. See also J. Am. M. Assoc. 1914, v. 63, p. 311–313; and Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 75.

Taylor, Lester: Clinical studies in caffeine. A preliminary report with observations on the effect on the pulse rate, effect on the respiratory rate, the blood pressure, diuresis, and the body weight.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 118–130; also Arch. Int. Med. 1914, v. 14, p. 769–778, and J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 516.

Edsall and Means: The effect of strychnine, caffeine, atropine, and camphor on the respiration and respiratory metabolism in normal human subjects.—Arch. Int. Med. 1914, v. 14, p. 897–910.

Salant and Kahn: Further observations on caffeine glycosuria. An abstract.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 512. See also Salant and Rieger: Am. J. Physiol. 1914, v. 33, p. 186–203.

Poffenberger, A. T.: A comparison of the effects of caffeine and strychnine on mental and motor efficiency.—Therap. Gaz. 1914, v. 38, p. 241–245.

Macht, D. I.: The action of drugs on the isolated pulmonary artery. Caffeine was found to produce a dilatation of the pulmonary ring. Curiously enough, theobromine, a closely allied purine body, produced no such effect, and indeed showed a tendency to a constrictor action.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 24.

Janeway, Theodore C.: The comparative value of cardiac remedies, including the study of the action of strophanthin, digitalis, caffeine, and its allies.—Arch. Int. Med. 1914, v. 13, p. 361–383.

Frankland, W. Ashby: The effects of caffeine and nicotine on the activity of the intestinal musculature.—New York M. J. 1914, v. 100, p. 307–308.

Githens, T. S.: The influence of decerebration on the convulsant action of caffeine in frogs.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 166–167.

Vinci, Gaetano: The histological modifications of the kidney determined by caffeine.—Arch. farmacol. sper. 1914, v. 17, p. 503–528, 544–580.

For additional references to caffeine see Index Med.; J. Am. M. Assoc.; Zentralbl. Biochem. u. Biophys.; Zentralbl. exper. Med.

CAFFEINA CITRATA.

Kebler, L. F.: Outline of method for the determination of citrated caffeine in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1089.

Department of Agriculture: Reports that 2-gr. caffeine citrated tablets were less than 1 gr.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

U. S. P. IX: Effervescent citrate of caffeine should contain not less than 1.9 per cent of anhydrous caffeine. Method of assay added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 549, and Abstr. Prop. Changes, Part 3, 1914, p. 26.

Editorial: Citrated caffeine has been found to be of use as a hemostatic, especially when used at the menopause, where there are frequent floodings. It has also been used in menorrhagia and metrorhagia and in post-partum hemorrhage.—Ellingwood's Therap. 1914, v. 8, p. 117.

CAFFEINÆ SODIO-SALICYLAS, N. F.

Rupp, E.: Outline of method for determining the caffeine content of caffeine sodium salicylate.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 314.

Kollo, Konstantin: Ampoules of caffeine sodium benzoate and of caffeine sodium salicylate may be sterilized for one hour at 100°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Newburgh, L. H.: Therapy of cardiovascular disturbances. With the methods used caffeine sodio-salicylate had no beneficial effect on the cardiovascular disturbances of the infectious diseases.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 84–91.

CALAMINE.

Noyes, C. R.: According to authorities calamine is an impure zinc carbonate, depending, perhaps, for its medicinal effects upon its impurities.—J. Am. Pharm. Assoc. 1914, v. 3, p. 856; also Proc. Minnesota Pharm. Assoc. 1914, p. 193.

CALAMUS.

Anon.: Illustrated description of calamus rhizome; the structural characteristics of the drug.—Southern Pharm. J. 1914, v. 6, p. 355–356.

J. B. Riedel, A.-G.: Calamus contained from 2.9 to 5.7 per cent of ash and from 17 to 18.1 per cent of extract soluble in two parts of alcohol and three parts water.—Riedel's Berichte, 1914, p. 33.

Freund, Hans: The composition of tincture of calamus and methods for testing the preparation.—Pharm. Zentralh. 1914, v. 55, p. 264–265.

Thoms and Beckstroem: Observations on the constituents of oil of calamus.—Arb. pharm. Inst. Univ. Berl. 1914, v. 67–68. See also Schimmel & Co.; Semi-Ann. Rep. April, 1914, p. 33–35.

Asahina and Imai: On the sesquiterpene contained in Japanese calamus oil.—J. Pharm. Soc. Japan, 1914, p. 1257.

CALCII CARBONAS PRÆCIPITATUS.

Baker, W. L.: Two lots of calcium carbonate contained aluminum in excess of the U. S. P. limits.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

E'we, G. E.: One lot of precipitated calcium carbonate examined contained an excessive amount of iron.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 132.

Hill, C. A.: Of 50 samples of precipitated calcium carbonate examined during the years 1912 and 1913, the lead content varied from

2 to 35 parts per million. The arsenic content varied from 0.2 to 2 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

Jensen, H. R.: Of 12 samples of precipitated chalk, only 1 exceeded 20 parts of lead per million; this sample contained 25 parts.—Evans' An. Notes, 1914, p. 16.

CALCII CHLORIDUM.

E'we, G. E.: One lot of calcium chloride examined contained many particles having yellowish spots. These were found to be due to iron.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 132.

Simeon, Frederick: Experimental observations on the viscosity of calcium chloride solutions.—Phil. Mag. 1914, v. 27, p. 95–100. See also Walker, W. J., p. 288–297.

Kayser, Curt: Clinical and experimental studies on calcium therapy, especially in bronchial asthma. Consideration of the use of calcium chloride.—Ztschr. exper. Path. u. Therap. 1914, p. 369–378.

Kahn, Max: Calcium therapy of tuberculosis.—Med. Rec. 1914, v. 85, p. 924–927.

Göppert, F.: Prolonged mild calcium medication seems to reduce the tendency to hay fever.—(Med. Klin. v. 10, June 14, No. 24) J. Am. M. Assoc. 1914, v. 63, p. 283.

Emmerich and Loew: A report of five cases, in which a chronic tendency to hay fever was broken up and the patients permanently freed from its grip by continued treatment with calcium chloride.—(Monat. Geburt. Gynäkol. 1913, v. 38, No. 6) J. Am. M. Assoc. 1914, v. 62, p. 247.

CALCIUM GLYCEROPHOSPHATE.

U. S. P. IX: To contain not less than 90 per cent of anhydrous normal calcium glycerophosphate. One gm. dissolves in about 50 cc. of water at 25°. Test for phosphates, chloride, sulphate, and limit of alcohol soluble impurities are added. Also a method of assay.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1566, and Abstr. Prop. Changes, Part 6, 1914, p. 4.

Anon.: The second supplement to the Ph. Ndl. IV describes calcium glycerophosphate as the neutral salt, soluble in 24.7 parts of water.—Pharm. Post, 1914, v. 47, p. 125; also Pharm. Weekblad, 1914, v. 51, p. 77.

Umney and Bennett: Commercial calcium glycerophosphate is of variable composition and does not correspond with a definite proportion of water.—Pharm. J. 1914, v. 93, p. 134–135; also Year-Book of Pharmacy, 1914, p. 406.

King and Pyman: The constitution of the glycerylphosphates. The synthesis of alpha and beta-glycerylphosphates.—J. Chem. Soc. Lond. 1914, v. 105, p. 1238–1259.

DuBois, Gaston: Commercial calcium glycerophosphate is a mixture of the alpha and beta isomerides.—J. Ind. & Eng. Chem. 1914, v. 6, p. 125–126.

François and Boismenu: A method for the assay of calcium glycerophosphate.—J. pharm. et chim. 1914, v. 10, p. 10–13; also Ann. Falsif. 1914, v. 7, p. 426.

DuBois, G.: Calcium glycerophosphate frequently contains citric acid to make it soluble in water. A true salt can be made, which is soluble in about 22 parts of water, without the aid of acid, and this soluble form remains in solution much better than the acid substitute.—Bull. Pharm. 1914, v. 28, p. 306.

Baker, W. L.: A sample of calcium glycerophosphate was found to contain an appreciable amount of chlorides; another sample contained citric acid.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

E'we, G. E.: One lot of calcium glycerophosphate was examined which contained an excess of calcium with resulting alkaline reaction.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 132.

Anon.: Formula for a compound solution of glycerophosphates of calcium, sodium, iron, manganese, quinine, and strychnine, with glycerin as a preservative.—N. A. R. D. Notes, 1914, v. 18, p. 364.

CALCII HYPOPHOSPHIS.

Rupp, E.: The quantitative determination of calcium hypophosphite makes a number of the Ph. Germ. V qualitative tests superfluous.—Südd. Apoth.-Ztg. 1914, v. 54, p. 302. See also Apoth.-Ztg. 1914, v. 29, p. 723.

E'we, G. E.: One lot of calcium hypophosphite examined was strictly U. S. P. except for a trace of iron. It assayed 98.3 per cent absolute calcium hypophosphite.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 132.

Baker, W. L.: A solution of calcium hypophosphite in water was decidedly opaque.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Hill, C. A.: Of 20 samples of calcium hpyophosphite examined during the years 1912 and 1913, the lead content varied from 1 to 8 parts per million. The arsenic content varied from 0 to 4 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

Anon.: It is now agreed that the hypophosphites pass through the system unchanged; they certainly have no specific influence when used in the treatment of tuberculosis.—J. Am. M. Assoc. 1914, v. 62, p. 2043.

CALCIUM LACTATE.

Hill, C. A.: Of 114 samples of calcium lactate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 15 parts per million. The arsenic content varied from 0 to 20 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

Anon.: It is generally agreed that calcium lactate is less irritating than the chloride and would perhaps be the best salt to give intramuscularly and by hypodermic injection.—J. Am. M. Assoc. 1914, v. 62, p. 634.

White, Charles J.: The curative powers of calcium lactate in the treatment of certain dermatoses appear to be limited.—J. Am. M. Assoc. 1914, v. 62, p. 1921.

Kayser, Curt: Clinical and experimental studies on calcium therapy, especially in bronchial asthma, including experiments with calcium lactate.—Ztschr. exper. Path. u. Therap. 1914, v. 16, p. 369–378.

CALCII PHOSPHAS PRÆCIPITATUS.

van Kampen, G. B.: The requirements for calcium phosphate as a medicine.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 1, p. 666–684.

Hill, C. A.: Of 39 samples of calcium phosphate examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0.2 to 600 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

Mann, E. W.: Several specimens of precipitated calcium phosphate were of very indifferent quality. The proportion of 10 parts per million of arsenic found in one sample was excessive. Another contained 8 parts per million, together with considerable amounts of lead and iron.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 44.

Jensen, H. R.: Fifteen samples all had less than 5 parts arsenic per million. The best commercial grade contained from 0.004 to 0.01 per cent of lead when tested under the most sensitive conditions.—Evans' An. Notes, 1914, p. 16.

CALUMBA.

U. S. P. IX: Described somewhat elaborately. Ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 367, and Abstr. Prop. Changes, Part 2, 1914, p. 9.

Anon.: An illustrated description of calumba, its general appearance and structural characteristics.—Southern Pharm. J. 1914, v. 6, p. 357, 402.

Tunmann, O.: A microchemical study of the constituents of calumba, with illustrations.—Pharm. Zentralh. 1914, v. 55, p. 775–780.

Rippetoe, J. R.: One sample of calumba root was found to contain 13.05 per cent of alcohol (65 per cent) extract and 5.88 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 437.

Maines, E. L.: Calumba root was found to contain from 7.87 to 10.87 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Calumba contained from 4.8 to 8.2 per cent of ash and from 17.5 to 18.1 per cent of extract soluble in 2 parts of alcohol and 3 parts of water.—Riedel's Berichte, 1914, p. 32.

Ramsay, C. F.: It is very difficult to thoroughly extract calumba, even after mixing with shavings. This drug contains about 35 per cent starch and 5 per cent of gum, which accounts for the trouble.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1646.

Carlson, van de Erve, Lewis and Orr: The action of the so-called stomachics or bitters on the hunger mechanism. In therapeutic quantities, the bitters, including calumba, have no effect on the gastric tonus and the gastric hunger contractions or on the parallel sensation of hunger.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 209–218.

CALX.

Burchard and Emley: The source, manufacture, and use of lime.—A separate, pages 1509–1593, from Mineral Resources of the United States for the calendar year 1913, Part 2, Washington, 1914.

Noyes, C. R.: If you buy lime for making limewater you will get an article containing perhaps 50 per cent magnesia, and also probably quantities of iron and other impurities.—J. Am. Pharm. Assoc. 1914, v. 3, p. 853; also Proc. Minnesota Pharm. Assoc. 1914, p. 189.

Stockinger, O.: All of the six lots of lime tested contained more than 90 per cent required by the U. S. P.; ranging from 94.7 to 98.4 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 144.

Bartow and Scholl: The comparative value of a calcium lime and a magnesium-calcium lime for water softening.—J. Ind. & Eng. Chem. 1914, v. 6, p. 189–191.

Slee, Arthur M.: Milk of lime may be prepared by adding 1 part of freshly water-slaked lime to 4 or 5 parts of water.—Am. J. Clin. Med. 1914, v. 21, p. 52.

U. S. P. IX: Lime water should be frequently prepared from fresh magma, the latter to be washed with boiling distilled water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 528, and Abstr. Prop. Changes, Part 3, 1914, p. 5.

Brewer, J. S.: Lime water is usually poorly prepared and poorly preserved. No matter how carefully the preparation is made, if it is kept in an ordinary container it will soon deteriorate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 605.

Bachman, Gustav: An illustrated description of an apparatus for the manufacture of lime water. (After Nitardy.)—Proc. Minnesota Pharm. Assoc. 1914, p. 130–133.

Pierce, W. E.: Five of fifteen samples of lime water were more or less deficient in their content of calcium hydroxide. This deficiency is thought to be due to one of two causes—carelessness in manufacture or carelessness in preservation.—Proc. Virginia Pharm. Assoc. 1913, 1914, p. 126–128.

CALX CHLORINATA.

Anon.: One of the most important chemicals in the arts is chloride of lime, or, rather, chlorinated lime, the world production of which in 1912 amounted to approximately 400,000 metric tons.—Am. Druggist, 1914, v. 62, p. 133.

Frary, Guy G.: One sample of chlorinated lime, which had been kept by a merchant for more than a year, was found to contain less than 1 per cent of available chlorine.—Rep. South Dakota F. & D. Com. 1914, p. 306–307.

Howard, Charles D.: Chlorinated lime, put out in cans commonly designated as pounds, is generally below standard, even when fresh. Four samples showed from 28.2 to 32.3 per cent chlorine.—Bull. New Hampshire Bd. Health, 1914, v. 3, p. 56.

Vosmaer, A.: The purification of water. Observations on the use of chlorinated lime.—Chem. Weekblad, 1914, v. 11, p. 927–930.

Thresh, John C.: The sterilization of potable waters by means of calcium hypochlorite.—Lancet, 1914, v. 187, p. 809–810.

Tully, E. J.: A study of calcium hypochlorite as a disinfectant of water.—Am. J. Public Health, 1914, v. 4, p. 423–435.

Whittaker, H. A.: The use of hypochlorite capsules for the treatment of small quantities of drinking water.—Am. J. Public Health, 1914, v. 4, p. 688–689.

Thomas, Stanley Judson: The hypochlorite of lime treatment of a municipal water supply and a study of certain resistant bacteria.—J. Ind. & Eng. Chem. 1914, v. 6, p. 548–552. See also Thomas and Sandman, p. 637–639.

Young, G. B.: The result of the experimental employment of hypochlorite treatment to a portion of the Chicago city water supply.—Am. J. Public Health, 1914, v. 4, p. 310–315.

Anon.: The reaction between chlorinated lime and sodium thiosulphate in the treatment of water.—Südd. Apoth.-Ztg. 1914, v. 54, p. 556.

Reisch, K.: A review of the recent literature relating to the manufacture of chlorinated lime.—Chem.-Ztg. 1914, v. 38, p. 464.

Steffenhagen, Karl: A review of the available literature on the treatment of water by means of chlorinated lime.—Hyg. Rundschau, 1914, v. 24, p. 185–208.

A book review of a volume on Chloride of Lime in Sanitation, by A. H. Hooker.—Nature, 1914, v. 92, p. 93.

CAMBOGIA.

U. S. P. IX: When rubbed with water it should yield a yellow emulsion becoming darker and almost transparent upon the addition of ammonia water. Ash not exceeding 2 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 368, and Abstr. Prop. Changes, Part 2, 1914, p. 10.

Anon.: Gamboge has been omitted from the Ph. Brit. V. It is admittedly too drastic and uncertain.—Lancet, 1914, v. 187, p. 907.

Anon.: A description of commercial gamboge, with illustrations of the flowering branch of *Gamboge hanburii.*—Southern Pharm. J. 1914, v. 6, 402–403.

Maines, E. L.: Gamboge was found to contain from 0.82 to 1.21 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Rippetoe, J. R.: One sample of gamboge was found to contain 76.36 per cent of alcohol, and 0.85 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

Stockinger, R.: Two of the thirteen samples examined were slightly above the U. S. P. limit of 25 per cent alcohol insoluble matter.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 139.

CAMPHOR.

Grosh, D. M.: The romance of camphor. A review of some of the history of camphor.—Midl. Drug. 1914, v. 48, p. 413–414.

Huggins, Harold C.: Camphor industry in Japan, with illustrations showing a flowering branch of *Cinnamomum camphora*, and the crude form of still, used in the production of camphor.—Southern Pharm. J. 1914, v. 6, p. 295–296.

Schimmel & Co.: Tables showing the production of camphor and camphor oil in Japan, the camphor exports from Japan, and the revenue from the camphor monopoly.—Semi-Ann. Rep. April, 1914, p. 37–38. See also Editorial: Chem. & Drug. 1914, v. 84, p. 87, and Oil, Paint & Drug Rep. 1914, v. 86, December 21, p. 9.

Anon.: The possibilities of the production of camphor in the Philippines is to be tried on a large scale by the local Bureau of Forestry.—Chem. & Drug. 1914, v. 84, p. 294.

Anon.: The camphor production in India. The tree has been successfully planted in Burma, Ceylon, and the Federated Malay States.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1715.

Gehe & Co.: Economic conditions of the camphor market, with tables showing the consumption of camphor in various countries.—Handelsbericht, 1914, p. 54–58.

Fernau, Albert: The pharmacopœia should include the vanillin hydrochloric acid test for camphor. Synthetic camphor does not give a color reaction.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v.

52, p. 228. See also Bohrisch, P.: Apoth.-Ztg. 1914, v. 29, p. 901, and Pharm Zentralh. 1914, v. 55, p. 893, 1003–1004.

Helch, Hans: A melting range should be given for camphor which melts at about 175°.—Pharm. Post, 1914, v. 47, p. 571.

Linke, H.: Six samples of camphor showed a melting point varying from 175 to 177.5°, and optical rotation of a 20 per cent solution in absolute alcohol of from +8.8 to +44°.—Apoth.-Ztg. 1914, v. 29, p. 528.

E'we, G. E.: One lot of camphor had a melting point of 178°, instead of 175° required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 133.

Rimini, E.: New researches in the camphor group.—Rend. soc. chim. ital. 1914, v. 6, p. 27–28.

Noyes and Nickell: Molecular rearrangements in the camphor series.—J. Am. Chem. Soc. 1914, v. 36, p. 118–127.

Wallerant, Fred: On the polymorphism of camphor.—Compt. rend. Acad. sc. 1914, v. 158, p. 597–598.

Marcelin, André: Study of the phenomena that accompany the movements of camphor on the surface of water.—Ann. Phys. Paris, 1914, v. 1, p. 32.

Lascoff, J. Leon: Camphor and its preparations. A review of the origin of the drug, and a list of the official U. S. P. and N. F. preparations; also formulas for a number of nonofficial preparations.—Proc. New York Pharm. Assoc. 1914, p. 267–273; also Drug. Circ. 1914, v. 57, p. 613–614, and D.-A. Apoth.-Ztg. 1914, v. 35, p. 113–114, 128–129.

Llewellyn, H. D.: Camphor water should be made as we now prepare limewater. A piece of camphor should be weighted so as to sink to the bottom of the bottle.—Proc. Missouri Pharm. Assoc. 1914, p. 141.

Penniman and Randall: A rapid method for the determination of camphor and of certain essential oils when in solution in alcohol.—J. Ind. & Eng. Chem. 1914, v. 6, p. 926–928.

Dowzard, Edwin: The determination of camphor in tablets and pills.—J. Ind. & Eng. Chem. 1914, v. 6, p. 489–490.

Marden and Elliott: A study of spirit of camphor to show the effect of added water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 91–94.

Reum, Arthur: Spirit of camphor can be readily made by plugging in the neck of a glass funnel and placing the camphor, previously pounded fine, in the funnel.—Pacific Pharm. 1914, v. 7, p. 310.

Frey, Otto: The testing of spirit of camphor and of camphorated oil according to the Ph. Austr. VIII.—Pharm. Post, 1914, v. 47, p. 85–86.

Caspari, Charles, jr.: Spirit of camphor was found which instead of containing 10 gms. of camphor in 100 cc. contained only 5 or 6 gm.—Proc. Maryland Pharm. Assoc. 1914, p. 72.

Table showing some of the analytical results reported for spirit of camphor.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	26	11	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A	29	20	Proc. Kentucky Pharm. Assoc. 1914, p. 118.
Brown, L. P	9	7	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1 p. 27.
Congdon, Leon A	24	21	Rep. Kansas Bd. Health, 1914, p. 100.
Frary, Guy G	147	63	Rep. South Dakota F. & D. Com. 1914, p. 222–223, 263–265, 336.
Ladd, E. F	123	50	Bull. North Dakota Exper. Sta. F. Dept. 1914, v. 3, p. 206–208.
Lythgoe, Hermann C	195	15	Rep. Massachusetts Bd. Health, 1913, 1914, p. 410.
Newcomb, George D	12	5	Proc. Iowa Pharm. Assoc. 1914, p. 28.
Porter, C. S	29	20	Proc. Kentucky Pharm. Assoc. 1914, p. 111.
Sayre, L. E	9	5	Bull. Kansas Bd. Health, 1914, v. 10, p. 25, 175.
Strode, Sylvanus E	5	3	Rep. Ohio D. & F. Div. 1914, p. 118.
Sudro, W. F	79	0	Rep. North Dakota F. Com. 1914, p. 34.
Todd, A. R	49	15	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd, A. R	48	14	Bull. Michigan D. & F. Dept. 1914, January-February, p. 17, March-April, p. 19, May-June, p. 27, September-October, p. 16, November-December, p. 22.
Wiedemann, H. E	63	32	Rep. Missouri F. & D. Com., 1914, p. 25–26.
Woods, Chas. D	59	33	Off. Insp. Maine Agric. Exper. Sta. 1914, No. 61, p. 92–93.

Carnot and Cairis: The comparative toxicity of camphor in different solvents.—Compt. rend. Soc. biol. 1914, v. 77, p. 162–163. See also Cairis, Valantine: J. Pharm. Chim. 1914, v. 10, p. 224, and abstract: Pharm. J. 1914, v. 93, p. 457.

Plant, O. H.: Experiments on the cardiac action of camphor.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 513, and p. 571–601.

Edsall and Means: The effect of camphor and other drugs on the respiration and respiratory metabolism in normal human subjects.—Arch. Int. Med. 1914, v. 14, p. 897–910.

Markevitch, M. S.: Large doses of camphor in pneumonia.—(Russky Vrach, v. 13, June 27, No. 24) J. Am. M. Assoc. 1914, v. 63, p. 2081. See also Editorial: New York M. J. 1914, v. 100, p. 980, and v. 99, p. 441.

Alexander, B.: The systematic injection of camphor in pulmonary tuberculosis.—J. Am. M. Assoc. 1914, v. 62, p. 419.

Heiser, Victor G.: Report of two cases of leprosy with apparent cure following treatment by a mixture of chaulmoogra oil, resorcin, and camphorated oil.—Public Health Rep. 1914, v. 29, p. 21–22.

Rosenbloom, Jacob: Gum camphor as a preservative for urine.—New York M. J. 1914, v. 99, p. 735–736.

For additional references see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

CANNABIS INDICA.

U. S. P. IX: The drug freed from the thicker stems and large foliage leaves, and with not more than 10 per cent of mature fruits.

Description somewhat elaborated. Ash not exceeding 15 per cent.—J. Am. Pharm. Assoc. 1914, v. 3 p. 368, and Abstr. Prop. Changes, Part 2, 1914, p. 10.

Anon.: Illustrated description of cannabis indica, with some consideration of the structural characteristics found in powdered cannabis indica.—Southern Pharm. J. 1914, v. 6, p. 404–405, 448–449.

Roberts, J. G.: Considerable effort is being made to raise domestic cannabis that will equal cannabis indica in phsyiological activity.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 132.

Patch, E. L.: East Indian cannabis indica contained 12.2 per cent of ether soluble resin. American drug consisted of leaves only.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Smith, Kline & French Co.: The tops of American cannabis indica contain from 10 to 12 per cent of seeds, and physically test 80 per cent of the Bombay variety.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Maines, E. L.: Cannabis indica was found to contain from 14 to 20.89 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Rippetoe, J. R.: Nine samples of cannabis indica were found to contain from 12.30 to 16.35 per cent of alcohol extract, 13.20 to 14.70 per cent of ash, and from 2.55 to 9.40 per cent of seeds.—Am. J. Pharm. 1914, v. 86, p. 437.

Mann, E. W.: One of the three samples of cannabis indica examined failed to reach the minimum limit of 12½ per cent fixed by the new Ph. Brit. V for matter soluble in alcohol (90 per cent). The results obtained were: Material soluble in alcohol (90 per cent) from 10.9 to 13.3 per cent; resin, 7.4 to 10.3 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 10.

Baker, W. L.: The resin content of American cannabis was low, 6.5 per cent.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Vanderkleed, C. E.: Reports one sample of cannabis indica, found to contain 13 per cent resin; above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Glücksmann, O.: Some new identification reactions for extract of cannabis indica.—Pharm. Praxis, 1913, v. 12, p. 465–471.

Wester, D. H.: A sample of extract of cannabis indica was not entirely soluble in ether and was evidently adulterated.—Pharm. Weekblad, 1914, v. 51, p. 1440.

Anon.: American cannabis is similar to the imported save in strength, being somewhat less active and given in larger doses.—Am. Druggist. 1914, v. 62, p. 368; also Phys. Drug. News, 1914, v. 9, p. 363.

Vanderkleed, C. E.: All lots of cannabis must be tested. We have examined lots of all varieties which have possessed little or no activity.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 133.

Hare, H. A.: The use of cannabis indica in therapeutics, is handicapped by its frequent lack of power. Only a preparation that has been physiologically tested should be used.—Med. Rec. 1914, v. 86, p. 824.

Doerschuk, Albert N.: Cannabis indica should be given in bulky dilutions only. Pills and tablets containing cannabis indica, and fluid preparations given in drop doses have frequently been known to quickly cause marked untoward effects.—Meyer Bros. Drug. 1914, v. 35, p. 328.

CANTHARIS.

U. S. P. IX.: Description somewhat elaborated. Ash not exceeding 9 per cent. When assayed by the process given should give not less than 0.6 per cent of cantharidin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 369, 988. and Abstr. Prop. Changes, Part 2, 1914, p. 11, Part 4, p. 5.

Anon.: Cantharides has been left out of the Ph. Brit. but replaced by its active principle.—Lancet, 1914, v. 187, p. 907; also Chem. & Drug. 1914, v. 85, p. 487.

Arends, Georg: Cantharidin may advantageously be substituted for cantharides in practically all of the galenical preparations, including the plaster, oil, and ointment.—Apoth.-Ztg. 1914, v. 29, p. 986.

Tunmann, O.: The imports of cantharides into Hamburg aggregate in the neighborhood of 7,000 kilograms, and more than 12,000 kilograms leave that port for other countries.—Apoth.-Ztg. 1914, v. 29, p. 100.

Gehe & Co.: The available supply of genuine cantharides has not been sufficient to cover the demand.—Handelsbericht, 1914, p. 58.

Tunnmann, O.: The microchemical detection of cantharidin, with illustrations.—Handelsbericht, Gehe & Co., 1914, p. 177–183.

Fernau, Albert: An assay process for cantharides should be included in the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 241.

Caesar & Loretz: The Fromme modification of Boudin's assay method for cantharides and the requirements for this product in the several pharmacopœias. Six samples of cantharides were found to contain from 0.857 to 1.285 per cent of cantharidin.—Jahres-Ber. 1914, p. 37, 54–56.

Hankey, William T.: The three samples of powdered cantharides were found to contain from 0.75 to 0.82 per cent of cantharidin.—Proc. Ohio Pharm. Assoc. 1914, p. 49.

Vanderkleed, C. E.: Reports five assays of Russian cantharides, found to vary from 0.75 to 1.06 per cent of cantharidin.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Ewe, G. E.: The 18 lots of cantharides, Chinese variety, examined varied between 0.11 and 1.95 per cent cartharidin, the average being 1.16 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 133.

Rippetoe, J. R.: Three samples of cantharides were found to contain from 4.88 to 7.21 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 437.

Maines, E. L.: Cantharides (Russian) was found to contain 6.61 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Gadamer, J.: The constitution of cantharidin.—Arch. Pharm. 1914, v. 252, p. 609–663.

Danckwortt, P. W.: Cantharidin, isocantharidin, and isocantharidinic acid.—Arch. Pharm. 1914, v. 252, p. 663–682.

U. S. P. IX: In making tincture of cantharides, the drug is to be macerated with the alcohol in a container fitted with a reflux condenser (upright glass tube) at a temperature of from 50 to 55° during 24 hours, with frequent agitation. The mixture is then transferred to a percolator and 100 cc. of percolate obtained.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1576–1577, and Abstr. Prop. Changes, Part 6, 1914, p. 14–15.

Scoville, Wilbur L.: A further note on tincture of cantharides, with a report of observations on the value of various menstrua used.—J. Am. Pharm. Assoc. 1914, v. 3, p. 631–634.

Formi, Gherado: On the natural resistance to the local irritation produced by cantharides.—Arch. farmacol. sper. 1914, v. 18, p. 107–114.

CAPSICUM.

U. S. P. IX: The fruit may include not more than 2 per cent of stems, calyxes, and other foreign matter. Total ash not exceeding 7 per cent. Ash insoluble in hydrochloric acid not exceeding 1 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 369, and Abstr. Prop. Changes, Part 2, 1914, p. 11.

Anon.: An illustrated description of capsicum; the variations in the seed pod of the different varieties and the structural characteristics found in powdered capsicum.—Southern Pharm. J. 1914, v. 6, p. 449–450.

Baker, W. L.: Cayenne pepper was found to be high in ash content, total ash being 9.86 per cent and HCl insoluble ash 5.6 per cent.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Rippetoe, J. R.: Four samples of capsicum were found to contain from 17.02 to 24.46 per cent of alcohol extract and from 4.87 to 7 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 437.

J. D. Riedel, A.-G.: Capsicum contained from 4.5 to 6.6 per cent of ash and from 31.9 to 35.3 per cent of extract soluble in alcohol.—Riedel's Berichte, 1914, p. 32.

Maines, E. L.: Capsicum was found to contain from 5.10 to 6.96 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Mann, E. W.: The ash content of three samples of the entire fruit of capsicum was found to be, respectively, 4.50, 4.71, and 5.54 per cent. The ash content of the two samples of the powder was found to be 7 and 6.04 per cent (Ph. Brit. maximum 7 per cent).—Ann. Rep. Southall Bros. & Barclay, 1914, p. 10.

Vanderkleed, C. E.: Reports 15 assays of capsicum, found to vary from 13 to 18 per cent of oleoresin; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

U. S. P. IX: Ether to replace acetone for making the oleoresin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 551, and Abstr. Prop. Changes, Part 3, 1914, p. 28.

Patch, E. L.: Reports oleoresin of capsicum as insoluble in ether, only slightly soluble in alcohol, and nearly soluble in water. The sample was worthless as oleoresin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1289.

E'we, G. E.: The four samples of oleoresin capsicum examined were pungent in dilutions of 1:150,000, our standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 152.

Editorial: Capsicum at one time was the most important medicine in the Thomsonian practice.—Eclectic M. J. 1914, v. 74, p. 324.

Williams, Thomas T.: In the treatment of malaria with quinine it has been found that if capsicum is added where the secretions are not efficient the patient recovers more rapidly with less quinine.—Ellingwood's Therap. 1914, v. 8, p. 135.

CARBO ANIMALIS.

Ditmar, Rudolf: The production of animal charcoal.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 526; also J. Pharm. Elsass-Lothr. 1914, v. 41, p. 293, and Pharm. Post, 1914, v. 47, p. 951–952.

Nagel, Oskar: The regeneration of animal charcoal.—Ztschr. ang. Chem. 1914, v. 27, p. 488.

Helch, Hans: Some of the uses of animal charcoal in therapy as an absorbent medium in the treatment of intestinal disorders.—Pharm. Post, 1914, v. 47, p. 949–951.

Anon.: Excellent results have been obtained with animal charcoal in diarrhea, enteritis, and severe cases of mineral poisoning.—Critic and Guide, 1914, v. 17, p. 235.

CARBO LIGNI.

Anon.: The best charcoal is derived from young willow shoots.—Southern Pharm. J. 1914, v. 6, p. 450.

Havenhill, L. D.: Carbo ligni of the western market, with a table showing the source of the product. The percentage of ash in 18 samples varied from 0.62 to 16.80.—Drug. Circ. 1914, v. 58, p. 260.

Hankey, William T.: Of 14 samples of wood charcoal examined, 9 were rejected.—Proc. Ohio Pharm. Assoc. 1914, p. 46.

Maines, E. L.: Charcoal was found to contain 6.21 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Mann, E. W.: Of 10 samples of wood charcoal tested, 2 proved to be very earthy, yielding 25.3 and 11.2 per cent of ash, respectively.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 11.

Wills, E. F.: Straw charcoal, a cheap absorbent and aseptic dressing for wounds, used by the Japanese.—Brit. M. J. 1914, v. 2, p. 541.

Rénon, Richet, and Lépine: A preliminary note on the antiseptic properties of colloidal charcoal.—Compt. rend. Soc. biol. 1914, v. 76, p. 66.

Apple, Franklin M.: For administering charcoal to children, crushed charcoal tablets were found to be most satisfactory.—J. Am Pharm. Assoc. 1914, v. 3, p. 231.

CARBON DIOXIDE.

Anon.: The normal boiling point of carbonic acid has been determined by Henning as −78.53°.—Nature, 1914, v. 93, p. 16.

Tuchler, A. S.: Carbon dioxide ice in skin cancer.—Ellingwood's Therap. 1914, v. 8, p. 9–10. See also Am. J. Clin. Med. 1914, v. 21, p. 633–634; and Foster, George S., p. 999–1000.

Ferris, Albert Warren: A brief outline of the carbon dioxide bath and its uses.—Med. Rec. 1914, v. 86, p. 107–109. See also Brandenberg and Laquer: Ztschr. exper. Path. u. Therap. 1914, v. 16, p. 194–216.

CARBONEI DISULPHIDUM.

Alcock, F. H.: The place of carbon disulphide in official pharmacy and suggestions for its further use.—Pharm. J. 1914, v. 92, p. 133–134; also Year-Book of Pharmacy, 1914, p. 399–401.

Evans, E. V.: The removal of carbon disulphide from coal gas.—Pharm. J. 1914, v. 93, p. 846.

Anon.: A description of Carpenter's process for purifying gas from sulphur compounds.—J. Ind. & Eng. Chem. 1914, v. 6, p. 262.

Seelye, Hiram H.: Carbon disulphide as a therapeutic agent.—New York M. J. 1914, v. 99, p. 437–439.

CARDAMOMUM.

U. S. P. IX: The dried seeds which should be kept in the capsules until wanted for use. Description elaborated. Ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 369, and Abstr. Prop. Changes, Part 2, 1914, p. 11.

Editorial: The proposed standard for cardamom seed requires that the dealer supply a drug for which the U. S. P. does not furnish a standard.—Pract. Drug. 1914, v. 32, p. 186.

Anon.: An illustrated description of cardamom, with some reference to the use of cardamom as an aromatic.—Southern Pharm. J. 1914, v. 6, p. 450–451.

Anon.: An illustrated description of Bengal cardamoms.—Brit. & Col. Drug. 1914, v. 65, p. 39.

Gehe & Co.: The reduced production of cardamom in Ceylon is due to the decrease in acreage and reduced yield due to exceptionally dry weather.—Handelsbericht, 1914, p. 78.

Alsberg, C. L.: Cardamom should contain not less than 64 per cent of sound cardamom seed and not more than 36 per cent of inert material, including the pods; ash of the whole fruit not to exceed 8 per cent.—S. R. A.-Chem. 1914, p. 529; also Drug. Circ. 1914, v. 58, p. 545, and Oil, Paint & Drug Rep. 1914, v. 85, July 27, p. 11.

Rippetoe, J. R.: Four samples of decorticated cardamom seed were found to contain from 3.20 to 6.02 per cent of alcohol extract and from 4.55 to 6.11 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 437.

Roberts, J. G.: One sample of decorticated cardamom examined was found to contain 3 per cent of volatile oil and yielded 6.11 per cent of ash.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 132.

E'we, G. E.: One sample of powdered cardamom seed assayed 8.49 per cent ash.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

Maines, E. L.: Cardamom was found to contain from 4.92 to 7.49 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Mann, E. W.: Two of the twenty-five samples of cardamom seeds tested for ash gave abnormal results. The figures 12.39 and 11 per cent, respectively, were so high as to indicate intentional adulteration. For the remaining samples, from 3.12 to 7.15 per cent were the results obtained.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 10.

J. D. Riedel, A.-G.: Cardamom contained from 7.2 to 9.2 per cent of ash and from 7.6 to 8.8 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

Hommell, P. E.: The Dublin College years ago omitted the cochineal in the formula for compound tincture. The same should be done in the U. S. P., as it has no value.—Merck's Rep. 1914, v. 23, p. 159.

McCutcheon, Alexander: The decoloration of compound tincture of cardamom by strontium bromide.—Pharm. J. 1914, v. 92, p. 698.

Amos, W. S.: The compound spirit of cardamom, N. F. made May 15, 1912, has darkened slightly and contains a slight precipitate. The taste suggests pimenta. A sample of spirit using oil of pimenta was a superior mixture.—J. Am. Pharm. Assoc. 1914, v. 3, p. 322.

CARUM.

U. S. P. IX: Mericarps usually separated, crescent shaped. Description elaborated. Ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 370, and Abstr. Prop. Changes, Part 2, 1914, p. 12.

Anon.: An illustrated description of caraway, with some reference to its use as an aromatic.—Southern Pharm. J. 1914, v. 6, p. 451, 518.

Gehe & Co.: Table showing the acreage and yield of caraway in Holland during the years 1904–1913, inclusive.—Handelsbericht, 1914, p. 78.

Plahl, Wilhelm: In the detection of extracted caraway considerable reliance is placed on the odor and taste of individual seed.—Arch. Chem. Mikros. 1914, v. 7, p. 209–211.

Maines, E. L.: Caraway was found to contain from 5.93 to 6.82 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Rippetoe, J. R.: One sample of caraway was found to contain 20.88 per cent of alcohol extract and 6.94 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 437.

J. D. Riedel, A.-G.: Caraway contained from 6.1 to 7.9 per cent of ash, and from 27.5 to 31 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Mann, E. W.: Of five samples of caraway tested for ash one yielded 13 per cent, indicating excessive contamination with earthy matter. For the remaining four the figures obtained ranged from 6.3 to 7.6 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 10.

CAROPHYLLUS.

U. S. P. IX: The dried flower bud with not more than 5 per cent of the peduncles, stems, and other foreign matter. Total ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 370, and Abstr. Prop. Changes, Part 2, 1914, p. 12.

Gehe & Co.: The economic conditions of the clove market, with tables showing the production of cloves in Zanzibar and Pemba in the years 1898 to 1912, inclusive.—Handelsbericht, 1914, p. 59–60. See also Schimmel & Co.: Semi-Ann. Rep. 1914, p. 47; and Roure-Bertrand Fils: Sc. & Ind. Bul. April, 1914, p. 42.

Anon.: An illustrated description of cloves with references to the adulterants that have been found and the uses to which the drug has been put.—Southern Pharm. J. 1914, v. 6, p. 518–519.

Maines, E. L.: Cloves were found to contain from 5.25 to 5.54 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Rippetoe, J. R.: Two samples of cloves were found to contain 5.99 and 5.50 per cent of ash; one sample contained 16.20 per cent of alcohol extract.—Am. J. Pharm. 1914, v. 86, p. 438.

J. D. Riedel, A.-G.: Cloves contained from 5.4 to 7.3 per cent of ash, and from 29.8 to 33.9 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

Hortvet, Julius: Of 67 samples of cloves examined, 14 were reported illegal.—Rep. Minnesota D. & F. Com. 1914, p. 68.

Parry, Ernest J.: The adulteration of cloves, with a table showing the constituents of some of the worst samples observed.—Merck's Rep. 1914, v. 23, p. 31.

CERA ALBA.

News Note: Use of ozonized air to whiten beeswax.—J. Soc. Chem. Ind. 1914, v. 33, p. 651.

Helch, Hans: The saponification of white wax should be conducted on a sand bath or on a wire netting.—Pharm. Post, 1914, v. 47, p. 571.

Dück: A sample of white wax was adulterated with stearin and had a melting point of 59.5°. The alcoholic solution was acid with litmus paper.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 234.

E'we, G. E.: Five lots of white wax examined had melting points ranging from 63 to 64.5°, all being very close to the U. S. P. limits of 64 to 65°.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 159.

Mann, E. W.: Seventeen samples of white beeswax varied in specific gravity from 0.961 to 0.969; melting point from 62° to 64°; acid value from 17.6 to 22.5; ester value from 74.5 to 77.6.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 8.

Jensen, H. R.: Eighteen samples of white wax were found to melt at from 62.5 to 63°, and to have an acid value of from 21 to 23, saponification value from 97 to 99, and ester value from 74 to 78.—Evans' An. Notes, 1914, p. 12.

CERA FLAVA.

Tunmann, O.: Table showing the amount of wax imported annually into Hamburg and the origin of the drug.—Apoth.-Ztg. 1914, v. 29, p. 100–101.

Noyes, C. R.: You can have beeswax or beeswax compound. You usually have a beeswax compound which contains anywhere from 2 to 70 per cent paraffin wax.—J. Am. Pharm. Assoc. 1914, v. 3, p. 855; also Proc. Minnesota Pharm. Assoc. 1914, p. 192.

Linke, H.: The Ph. Germ. V method for the determination of the ester number of wax gives misleading results; the method outlined by Berg-Bohrisch is more satisfactory.—Apoth.-Ztg. 1914, v. 29, p. 489. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 239.

Bohrisch, P.: The Ph. Germ. V upper limit of acid number is too high. Twenty-two would be nearer correct.—Apoth.-Ztg. 1914, v. 29, p. 901; also Pharm. Zentralh. 1914, v. 55, p. 893–895.

Fischer, Hanns: Critical observations on beeswax and the analyses of commercial samples.—Apoth.-Ztg. 1914, v. 29, p. 985; also Pharm. Zentralh. 1914, v. 55, p. 1017–1019, and Ztschr. öffentl. Chem. 1914, v. 20, p. 318–321. See also a reply by Buchner, 349–351; and Fischer, 409–415.

Heinze, Karl: A study of the economic condition of beeswax and the methods of analysis.—Seifensieder Ztg. 1914, v. 41, p. 1234–1235, 1255–1257. See also Buchner and Deckert, p. 1302–1303, 1324–1325.

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Ewe, G. E.: The seven lots of yellow wax examined had melting points ranging from 61.5 to 65°. The U. S. P. limits are 62 to 64°.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 159.

Mann, E. W.: The specific gravity of the normal samples of beeswax varied from 0.958 to 0.970; melting point from 61.5 to 64°; acid value from 17.5 to 20.8; ester value from 67.3 to 76.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 8.

Mansfeld, M.: Of five samples of wax examined three were inferior products.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 68, p. 525.

Jensen, H. R.: Of 38 samples of yellow wax examined 4 were found to be adulterated.—Evans's An. Notes, 1914, p. 12.

For additional references on wax see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.

CERATA.

U. S. P. IX: Ceratum to be made from white wax and benzoinated lard.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1567, and Abstr. Prop. Changes, Part 6, 1914, p. 5.

Curry, Gordon L.: The six official cerates are all easily made, even by a novice.—Proc. Kentucky Pharm. Assoc. 1914, p. 57.

Raubenheimer, Otto: Do not dispense cerates and ointments when rancid, because they are very irritating.—J. Am. Pharm. Assoc. 1914, v. 3, p. 974.

CETACEUM.

Tunmann, O.: The spermaceti imported into Hamburg comes mainly from England and North America, and in turn is distributed to Russia, Austria, and Switzerland.—Apoth.-Ztg. 1914, v. 29, p. 101.

Mann, E. W.: In our opinion, the lower limit for saponification value given in the 1914 Ph. Brit. is rather too high. We have obtained 122 or 123 for samples of undoubted genuineness.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 23.

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Anon.: Chloralamide is prepared by mixing anhydrous chloral with formamide at ordinary temperatures and allowing to crystallize. The formamide can be obtained by distilling ammonium formate.—Southern Pharm. J. 1914, v. 7, p. 60.

Becker, Henry C.: In the treatment of epilepsy, chloralamide, 45 grains per dose, or 90 grains a day, is very useful at times in certain cases.—Merck's Arch. 1914, v. 16, p. 36.

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Fernau, Albert: The melting point of chloral hydrate can not be determined absolutely and melting ranges from 53 to 56° should be permitted.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 241.

Ewe, G. E.: One lot of chloral hydrate examined contained negligible traces of chlorides, but was otherwise of U. S. P. quality.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

Lintner and Lüers: The reduction of hydrated chloral by means of yeast in the course of alcoholic fermentation.—Ztschr. physiol. Chem. 1914, v. 88, p. 122–123.

Coppin and Titherley: The condensation of chloral hydrate and carbamide.—J. Chem. Soc. Lond. 1914, v. 105, p. 32–36.

Beckman and Maxin: Chloral hydrate and bromal hydrate as cryoscopic or ebullioscopic solvents.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 2875–2880.

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Frankforter and Kritchevsky: The action of chloral, chloral hydrate and bromal on certain organic compounds in the presence of aluminium chloride.—J. Am. Chem. Soc. 1914, v. 36, p. 1511–1529.

Law, W. F.: Treatment of tetanus. Full dose of hydrated chloral followed by sufficient of the drug to keep the patient constantly under its influence and free from spasms.—Brit. M. J. 1914, v. 2, p. 877.

Roch and Cottin: Intravenous injection of chloral in the treatment of tetanus was successfully employed in a boy, age 13. An Abstract.—Med. Rec. 1914, v. 86, p. 572.

Becker, Henry C.: Hydrated chloral is considered a specific adjuvant in the treatment of epilepsy.—Merck's Arch. 1914, v. 16, p. 36.

CHLOROFORMUM.

Anon.: The normal freezing point of chloroform has been determined by Henning as —63.7°.—Nature, 1914, v. 93, p. 16.

Fernau, Albert: The water content of chloroform should be recognized and restricted.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 241.

Linke, H.: The Ph. Germ. V requirements for chloroform for narcosis might also be required of the chloroform for pharmaceutical purposes.—Apoth.-Ztg. 1914, v. 29, p. 683.

Richter, Ernst: Three samples of chloroform for anesthesia did not comply with the formaldehyde sulphuric acid test.—Apoth.-Ztg. 1914, v. 29, p. 211.

Scoville, W. L.: Some lots of chloroform contained chlorine compounds and organic bodies, which modified the odor and made it unfit for use.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Brown, Lucius P.: Of four samples of chloroform examined one was found to be illegal.—Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.

Ewe, G. E.: Of seven samples of chloroform examined, four were strictly U. S. P. The other three samples left disagreeable odors on evaporation and contained slight traces of substances decomposable by sulphuric acid.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

Roberts, J. G.: Of eight lots examined, one was rejected on account of the presence of chlorides.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

Baker, W. L.: Chloroform, in bottles of 100 gm., was found to vary from 68.7 to 94 gm. in weight.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

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MacWilliam, J. A.: Cardiac fibrillation and its relation to chloroform and anesthesia.—Brit. M. J. 1914, v. 2, p. 499–500.

Githens and Meltzer: The irritability of motor nerves in chloroform anesthesia.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 523.

Buck, Leonard W.: Effects of chloroform and of ether anesthesia on the protein contents of the blood serum of rabbits.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 553–557.

Whiting, Maurice H.: Anesthetics in eye work.—Brit. M. J. 1914, v. 2, p. 471. See also Marshall, C. Devereux; also Traquair, H. M., p. 541; and Butler, T. Harrison, p. 716.

Lawrie, E.: The action of chloroform. The work of the Hyderbad Commission.—Brit. M. J. 1914, v. 2, p. 605.

Moriarty, George: The position of chloroform as an anesthetic. No method of administering chloroform is entirely free from risk.—Brit. M. J. 1914, v. 1, p. 791–792.

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Bacon and Barsony: On the action of chloroform and of ether narcosis on the motor function of the stomach.—Arch. ges. Physiol. 1914, v. 158, p. 464–477.

Opie and Alford: The influence of diet on hepatic narcosis and toxicity of chloroform.—J. Am. M. Assoc. 1914, v. 62, p. 895–896. See also v. 63, p. 136.

CHONDRUS.

U. S. P. IX: The entire plants more or less matted together. Description elaborated, including a description of the utility.—J. Am. Pharm. Assoc. 1914, v. 3, p. 371; and Abstr. Prop. Changes, Part 2, 1914, p. 13.

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Caesar & Loretz: The valuation of Irish moss includes the determination of moisture content, ash content, and tests for sulphurous acid.—Jahres-Ber. 1914, p. 56.

Maines, E. L.: Irish moss was found to contain from 16.61 to 17.64 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

CHROMII TRIOXIDUM.

Mann, E. W.: One sample of chromic acid only was sufficiently pure to comply with the requirements of the Ph. Brit. 1898. It contained 98.85 per cent of chromium trioxid (CrO_3), and was practically free from sulphates. Six other samples yielded from 81 to 84.6 per cent CrO_3.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 44.

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Bailey, E. Monroe: Some reactions of chrysophanic acid, with reference to its detection in complex medicinal preparations.—J. Ind. & Eng. Chem. 1914, v. 6, p. 320–321.

Fox, Howard: Obstinate cases of psoriasis that have long resisted vigorous treatment with chrysarobin ointment will often yield to this remedy when injections of autogenous serum are given.—J. Am. M. Assoc. 1914, v. 63, p. 2190–2194.

CIMICIFUGA.

U. S. P. IX: The drug may include not more than 2 per cent of the stems and other foreign matter. Description somewhat elaborated. Ash not exceeding 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 371; and Abstr. Prop. Changes, Part 2, 1914, p. 13.

Stanaland, H. G.: Manufacturers or dealers frequently label cimicifuga "cohosh" or "macrotys."—Drug. Circ. 1914, v. 58, p. 349.

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Rippetoe, J. R.: Two samples of cimicifuga were found to contain 12.20 and 6.43 per cent of alcohol extract, and 9.30 and 8.93 per cent of ash, respectively.—Am. J. Pharm. 1914, v. 86, p. 438.

Hankey, William T.: One lot of black cohosh rejected contained 23 per cent of ash.—Proc. Ohio Pharm. Assoc. 1914, p. 54.

U. S. P. IX: One gm. of the powdered extract to represent 4 gm. of the drug. Dried starch to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 534; and Abstr. Prop. Changes, Part 3, 1914, p. 11.

Anon.: Cimicifuga is a component of quite a number of the proprietary "female remedies."—Southern Pharm. J. 1914, v. 7, p. 26.

Fisk, F. H.: Macrotys is one of the oldest of botanical remedies. It is frequently referred to in eclectic literature.—Ellingwood's Therap. 1914, v. 8, p. 141–142.

Ellingwood, Finley: Macrotys racemosa is the plant commonly known as black cohosh; it also bears the older botanical name of cimicifuga racemosa.—Am. J. Clin. Med. 1914, v. 765–769.

Alderman, Theodore Davis: In ovarian neuralgia, cimicifuga is called for.—Eclectic M. J. 1914, v. 74, p. 7.

Editorial: The action of macrotys in the treatment of dysmenorrhea and amenorrhea should be emphasized.—Ellingwood's Therap. 1914, v. 8, p. 195.

CINCHONA.

U. S. P. IX: Description elaborated. Qualitative test added. To assay not less than 6 per cent of the total alkaloids of cinchona.—J. Am. Pharm. Assoc. 1914, v. 3, p. 372, 989, and Abstr. Prop. Changes, Part 2, 1914, p. 14, Part 4, p. 6.

Schwartz, J.: The history of cinchona, a review.—Eclectic M. J. 1914, v. 74, p. 511.

Anon.: An illustrated description of the cinchona plant, the official barks and the structural characteristics of the bark.—Southern Pharm. J. 1914, v. 7, p. 26–28, 76.

Gehe & Co.: Table showing the amount of cinchona bark offered for sale and sold in the Amsterdam market during 1913.—Handelsbericht, 1914, p. 66. See also Brit. & Col. Drug. 1914, v. 65, p. 40.

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Watson, G. N.: A new test for cinchona alkaloids.—Drug. Circ. 1914, v. 58, p. 14.

Perrot and Huber: The evaluation of the cinchonas cultivated in Madagascar.—Bull. sc. pharmacol. 1914, v. 21, p. 257–263; also Pharm. Weekblad, 1914, v. 51, p. 841–847.

Kollo, K.: The composition of the root barks of the cinchonas.—Pharm. Zentralh. 1914, v. 55, p. 62–63.

Dufilho, E.: The volumetric determination of alkaloids in cinchona and its galenical preparations.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 53–59.

Anon.: The second supplement to the Ph. Ndl. IV outlines a modified titration method for the assay of alkaloids in cinchona. The titration is in solution, using methyl red as an indicator.—Pharm. Post, 1914, v. 47, p. 126.

Linke, H.: The Ph. Germ. V method of assay for cinchona with barks containing more than 5 per cent of total alkaloids gives results that are too low.—Apoth.-Ztg. 1914, v. 29, p. 489.

Caesar & Loretz: A review of the assay of cinchona, with a table showing the requirements included in the several pharmacopœias.—Jahres-Ber. 1914, p. 57–60. See also p. 9–11.

Anon.: The assay of quinine in cinchona bark. An abstract from the paper by Broersma.—Chem. & Drug. 1914, v. 84, p. 857.

Neal, P. C.: Of nine samples of cinchona bark examined all were accepted.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

Linke, H.: Two samples of cinchona bark gave 3.55 and 13.65 per cent of ash and 8.96 and 8.30 per cent of total alkaloids.—Apoth.-Ztg. 1914, v. 29, p. 530.

Caesar & Loretz: A total of 37 samples of cinchona were found to vary from 3.49 to 12.22 per cent of alkaloid. Three samples contained from 1.85 to 5.45 per cent of ash.—Jahres-Ber. 1914, p. 37.

Vanderkleed, C. E.: Reports 10 assays of yellow cinchona, found to vary from 5.29 to 9.13 per cent total anhydrous alkaloids; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Meulenhoff, J. S.: The preparation of a fluid extract of cinchona.—Pharm. Weekblad, 1914, v. 51, p. 101–104.

Ramsay, C. F.: In making fluid extracts of cinchona, calisaya, it is found that by not adding the glycerin to the menstruum and reserving the first portion of percolate from each percolator, very good results are obtained.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1647.

U. S. P. IX: To require that 100 cc. of the fluid extract of cinchona yield not less than 4.5, nor more than 5.5 gm. of the total alkaloids of cinchona.—J. Am. Pharm. Assoc. 1914, v. 3, p. 989, and Abstr. Prop. Changes, Part 4, 1914, p. 6.

Caesar & Loretz: Two samples of fluid extract of cinchona were found to contain 4.56 and 5.49 per cent of alkaloid; 2.05 and 2.75 per cent of ash; and 20.5 and 27.65 per cent of extract.—Jahres-Ber. 1914, p. 37.

Wold, Thomson: The uniformity of the alkaloid content in tinctures and in wines of cinchona.—Pharm. Zentralh. 1914, v. 55, p. 43–46.

Eagon, S. E.: Cinchona is valuable in debility of the stomach and digestive tract, especially if associated with general atony.—Eclectic M. J. 1914, v. 74, p. 512.

Postle, F. D.: The four chief alkaloids of cinchona.—Eclectic M. J. 1914, v. 74, p. 512–513.

CINCHONA RUBRA.

U. S. P. IX: Description elaborated. Qualitative test added. Red cinchona to yield not less than 6 per cent of the total alkaloids of cinchona.—J. Am. Pharm. Assoc. 1914, v. 3, p. 372, 990, and Abstr. Prop. Changes, Part 2, 1914, p. 14, Part 4, p. 7.

Dufilho: Observations on the extraction of the official red cinchona. Sixty per cent alcohol was found to be the most satisfactory menstruum.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 149–157.

J. D. Riedel, A.-G.: Red cinchona contained from 1.9 to 4.6 per cent of ash, from 21.4 to 24.5 per cent of extract soluble in water, and from 27.5 to 37.0 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

Maines, E. L.: Cinchona bark, red, was found to contain from 9.30 to 15.07 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Scoville, W. L.: Reports that 12 lots of red chincona yielded from 7.21 to 11.63 per cent of total alkaloids.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Vanderkleed, C. E.: Reports 14 assays of red cinchona, found to vary from 6.83 to 10.18 per cent of total anhydrous alkaloids; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 150.

U. S. P. IX: To require that 100 cc. of compound tincture of cinchona yield not less than 0.45 gm., nor more than 0.55 gm. of the total alkaloids of cinchona.—J. Am. Pharm. Assoc. 1914, v. 3, p. 990, and Abstr. Prop. Changes, Part 4, 1914, p. 7.

CINCHONIDINÆ SULPHAS.

Watson, G. N.: Color test for cinchonidine.—Drug. Circ. 1914, v. 58, p. 14.

E'we, G. E.: The one lot of cinchonidine alkaloid examined melted at 206° and was free from moisture.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

Kebler, L. F.: Outline of method for the determination of cinchonidine in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1090.

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Baker, W. L.: Cinchonine sulphate was found to have a low melting point and to be deficient in chloroform-soluble material.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

E'we, G. E.: The one lot of cinchonine alkaloid examined was free from chloroform, but contained 0.15 per cent moisture.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

CINNALDEHYDUM.

Phillips, H. Adie: The stability of cinnamic aldehyde.—Pharm. J. 1914, v. 93, p. 129–130; also Year-Book of Pharmacy, 1914, p. 371–374.

Braithwaite, J. O.: A correction of statement made in the paper on cinnamic aldehyde, p. 159.—Pharm. J. 1914, v. 92, p. 214.

Jensen, H. R.: One sample of crude cinnamic aldehyde, derived from cassia oil, had: Specific gravity, 1.055; refractive index, 1.6195; optical rotation, −0.14°.—Evans' An. Notes, 1914, p. 23.

CINNAMOMUM SAIGONICUM.

U. S. P. IX: Description elaborated. Total ash not exceeding 6 per cent. Ash insoluble in diluted hydrochloric acid not exceeding 2 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 372, and Abstr. Prop. Changes, Part 2, 1914, p. 14.

Editorial: Cinnamon trees were introduced into the Seychelles Islands in 1775.—Am. Perf. 1914, v. 9, p. 71.

Anon.: An illustrated description of the cinnamon pressing machine used at the London docks.—Chem. & Drug. 1914, v. 84, p. 393–394.

Maines, E. L.: Saigon cinnamon was found to contain from 3.06 to 5.03 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Jensen, H. R.: A sample of African bark had an ash residue of 3 per cent.—Evans' An. Notes, 1914, p. 23.

Hortvet, Julius: Of 82 samples of cinnamon examined, 10 were reported illegal.—Rep. Minnesota D. & F. Com. 1914, p. 68.

Freund, Hans: The composition of tincture of cinnamon and methods for testing the preparation.—Pharm. Zentralh. 1914, v. 55, p. 265–266.

Editorial: Cinnamon has properties which make it nearly specific for certain conditions.—Eclectic M. J. 1914, v. 74, p. 266–267.

CINNAMOMUM ZEYLANICUM.

U. S. P. IX: Description elaborated. Total ash not exceeding 6 per cent. Ash insoluble in diluted hydrochloric acid not exceeding 2 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 373, and Abstr. Prop. Changes, Part 2, 1914, p. 15.

Anon.: An illustrated article on cinnamon, showing the flowering branch of *Cinnamomum Zeylanicum*, and method of removing the bark, the characteristic features of the several commercial cinnamon barks, and the structural characteristics of these barks.—Southern Pharm. J. 1914, v. 7, p. 76–79, 121–122.

Gehe & Co.: Economic conditions of the market in cinnamon and cassia, with a table showing the destination of Ceylon cinnamon.—Hendelsbericht, 1914, p. 64.

Linke, H.: For Ceylon cinnamon an extract content of not less than 13 per cent might be included in the pharmacopœia. Two samples gave, respectively, 14.80 and 14.45 per cent of extract and 3.60 and 4.72 per cent of ash.—Apoth.-Ztg. 1914, v. 20, p. 530.

Rippetoe, J. R.: One sample of Ceylon cinnamon was found to contain 14.33 per cent of alcohol extract and 4.01 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 438.

J. D. Riedel, A.-G.: Ceylon cinnamon contained from 3.3 to 5.2 per cent of ash and from 16.7 to 19.9 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

COCA.

Anon.: An illustrated description of coca, with some reference to the history and uses of coca.—Southern Pharm. J. 1914, v. 7, p. 122–124, 170.

Wilbert, M. I.: Sale and use of cocaine and narcotics, with table showing the quantities of the several drugs entered for consumption in the United States during the years 1910 to 1913.—Public Health Rep. 1914, v. 29, p. 3180–3183.

Baker, W. L.: Coca leaves were found to have deteriorated badly, odor musty, and to contain but 0.09 per cent ether-soluble alkaloids.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Maines, E. L.: Coca leaves were found to contain from 6.22 to 12.07 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Coca leaves contained from 7 to 10.4 per cent of ash, and from 26.7 to 33.4 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, 31.

Caesar & Loretz: The valuation of coca, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 81–83.

Wester, D. H.: The alkaloids of coca in the young leaf are found in the epidermal layer of both the upper and the lower side of the leaf.—Ber. deutsch. pharm. Gesellsch. 1914, v. 24, p. 127; also Pharm. Weekblad, 1914, v. 51, p. 231.

de Jong, A. W. K.: The nature and value of the Javanese coca.—Compt. rend. Congr. Internat. Pharm. 1913, v. 2, p. 979–981; also Bull. sc. pharmacol. 1914, v. 21, p. 289.

Vanderkleed, C. E.: Reports 10 assays of coca leaf, found to vary from 0.594 to 1.15 per cent of ether soluble alkaloids; all above standard.—proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

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Kottenhoff, G.: Brief review of the history and commerce of coca and cocaine.—Rev. internat. pharm. Brux. 1913, v. 1, p. 90–93.

American Letter: It is estimated that cocaine to the amount of 150,000 ounces is manufactured annually in the United States.—Chem. & Drug. 1914, v. 85, p. 366.

Wilbert, M. I.: Table showing the quantities of cocaine and narcotics entered for consumption in the United States during the years 1910–1913.—Public Health Rep. 1914, v. 29, p. 3180–3183.

Marden and Elliott: The distribution ratio of cocaine alkaloid between ether and water was found to be very small, in the neighborhood of 0.01.—J. Ind. & Eng. Chem. 1914, v. 6, p. 930.

Pisani, F.: A new reaction for cocaine.—Rend. soc. chim. ital. 1914, v. 6, p. 132–133.

van der Haar, A. W.: A method for the determination of benzoyl in benzoyl derivatives.—Arch. Pharm. 1914, v. 252, p. 205–208.

Kebler, L. F.: Outline of method for the determination of cocaine in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1091.

Bouyer, J.: The incompatibility of sodium borate and cocaine hydrochloride. An illustrated description of the crystals observed.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 64–69.

Anon.: The protocol of the International Opium Convention, including a list of the countries that have signified adherence to the provisions of the protocol.—Rev. Internat. Pharm. Brux. 1914, v. 2, p. 4–7.

Anon.: The possible spread of betel nut chewing as a substitute for the use of cocaine should be warned against.—Lancet, 1914, v. 187, p. 976.

Wallis, James H.: The increase in the use of cocaine in this country is a public scandal.—Proc. Idaho Pharm. Assoc. 1914, p. 13. See also Stallings, R. E.: Proc. Georgia Pharm. Assoc. 1914, p. 52.

Pettey, George E.: Cocaine as a respiratory stimulant.—Merck's Arch, 1914, v. 16, p. 177–179.

Porter, William Henry: The value of cocaine in disturbances of metabolism.—New York M. J. 1914, v. 99, p. 815–819. See also Boston M. & S. J. 1914, v. 170, p. 586–587.

Kochmann, M.: A comprehensive review of anesthetics and pain-relieving remedies, including a graphic presentation of the comparative anesthetic properties and toxic properties of cocaine and other substances used as local anesthetics.—Therap. Monatsh. 1914, v. 28, p. 641–653.

Miller, Albert H.: The dosage of cocaine and other drugs used for producing local surgical anesthesia.—J. Am. M. Assoc. 1914, v. 62, p. 196.

Guy, W.: Cocaine or other drugs for spinal anesthesia can find no employment in dental surgery.—Dental Cosmos, 1914, v. 56, p. 1297.

COCAINÆ HYDROCHLORIDUM.

Roques, Ferdinand: The decline in cocaine hydrochloride during 1913 was much more accentuated than that of the coca-leaves, and the year closed at the lowest price on record.—Chem. & Drug. 1914, v. 84, p. 212.

Fernau, Albert: For the successful application of the MacLagan test for foreign coca bases, the temperature should not exceed 50°, and the ammonia be accurately measured.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 241.

Kollo, Konstantin: Ampoules of cocaine hydrochloride should be Tyndallized for three days at 90°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Bouyer, E.: The incompatibility of sodium borate and cocaine hydrochloride.—Bull. soc. pharm. Bordeaux, 1914, v. 54, p. 64–69. See also Pharm. Era, 1914, v. 47, p. 465.

COCCUS.

U. S. P. IX: The dried female insect inclosing her young larvæ. Description elaborated; qualitative chemical test added. Ash not exceeding 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 373, and Abstr. Prop. Changes, Part 2, 1914, p. 15.

Tunmann, O.: Tables showing the Hamburg imports and exports of cochineal from 1898 to 1911, inclusive, the greater portion of the drug coming direct from the Canary Islands. Small quantities come from America by way of London.—Apoth.-Ztg. 1914, v. 29, p. 101.

Caesar & Loretz: The valuation of cochineal includes the determination of moisture content, ash content, and color value.—Jahres-Ber. 1914, p. 56–57.

Patch, E. L.: Reports cochineal to contain 10 per cent of ash, including considerable magnetic iron oxide.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Maines, E. L.: Cochineal was found to contain from 3.69 to 13.15 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Hankey, William T.: Of 17 samples of cochineal examined, 8 were rejected.—Proc. Ohio Pharm. Assoc. 1914, p. 53.

CODEINA.

Wester, D. H.: The several pharmacopoeias give the melting point of codeine as being from 152° to 155°. Codeine with one molecule of water of crystallization melts at about 153°, while water-free codeine melts at 155°.—Pharm. Weekblad. 1914, v. 51, p. 1440.

Mossler, Gustav: A report of experiments on the production of opium alkaloids from the capsules.—Pharm. Post, 1914, v. 47, p. 483–486.

Marden and Elliott: When using equal volumes of water and ether about as much of the codeine remains in the aqueous layer as goes into the ether layer. Chloroform would remove the codeine as completely as could be desired in the analytical laboratory.—J. Ind. & Eng. Chem. 1914, v. 6, p. 930.

Gsell and Marschalké: The quantitative determination of several opium alkaloids, on the basis of their conversion into their methyloxyl-group.—Ztschr. Anal. Chem. 1914, v. 53, p. 675–678.

Gehe & Co.: The concentrated sulphuric acid test for codeine may be misleading unless allowed to stand. Practically every sample of codeine will give a rose red coloration, but this disappears on standing.—Pharm. Zentralh. 1914, v. 55, p. 400.

Ewe, G. E.: Of the two lots examined, one was strictly U. S. P., having a melting point of 155° and assaying 5.47 per cent of water. The other sample was effloresced and assayed 104 per cent of the U. S. P. crystallized article.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

Jensen, H. R.: Three samples of codeine had a melting point of from 152° to 155°, and a titration value corresponding to 99.5 per cent.—Evans' An. Notes, 1914, p. 26.

Kebler, L. F.: Outline of method for the determination of codeine in compressed tablets of acetanilide compound.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1082.

Brown, Lucius P.: One sample of codeine tablets examined was found to be illegal.—Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.

Brown, L. A.: Three samples of codeine tablets analyzed; one passed and two adulterated. Samples varied in strength from 106.5 to 58.5 per cent.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Strode, Sylvanus E.: Of seven samples of codeine tablets examined, one was not passed.—Rep. Ohio D. & F. Div. 1914, p. 120.

Mannich and Leemhuis: A number of codeine tablets were found to vary in weight from 0.16 to 0.25 gm. and to contain an average of 0.015 gm. of codeine, in place of 0.05 gm., as claimed.—Apoth.-Ztg. 1914, v. 29, p. 194.

Anon.: A list of the alkaloids, derivatives, and preparations for which official order blanks will be required in New York under the Boylan law.—Drug Topics, 1914, v. 29, p. 104–105.

Jackson, D. E.: A note on the pharmacological action of opium alkaloids.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 57–72.

Pitini, A.: Pharmacological research on several derivatives of morphine and of codeine.—Ann. chim. applicata, 1914, v. 2, p. 208–213.

Kochmann, M.: The use of codeine and related compounds for relieving pain.—Therap. Monatsh. 1914, v. 28, p. 649.

CODEÏNÆ PHOSPHAS.

E'we, G. E.: One lot of codeine phosphate examined tested 100.8 per cent of absolute codeine phosphate. As the U. S. P. calls for the crystallized salt with two molecules of water of crystallization, this product was considerably over strength.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 135.

Linke, H.: The Ph. Germ. V requirement for water of crystallization, of codeine phosphate, is not ordinarily complied with by the commercial article. Nine samples examined lost, on drying at 100°, from 6 to 8.20 per cent, only one of these complying with the minimum requirement of the pharmacopœia.—Apoth.-Ztg. 1914, v. 29, p. 683.

CODEINÆ SULPHAS.

Todd, A. R.: Of five samples of tablet triturates of codeine sulphate examined, one was found to be adulterated.—Rep. Michigan D. & F. Com. 1914, p. 176.

Todd, A. R.: One sample of tablet triturates of codeine sulphate examined was found to be adulterated.—Bull. Michigan D. & F. Dept. 1914, May–June, p. 27.

COLCHICI CORMUS.

U. S. P. IX: Description elaborated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 374. and Abstr. Prop. Changes, Part 2, 1914, p. 16.

Anon.: An illustrated description of the flowering plant of *Colchicum autumnale* L.—Chem. & Drug. 1914, v. 84, p. 252. See also Southern Pharm. J. 1914, v. 7, p. 170–173.

Lewis, S. Judd: A fine specimen of dried English corm was found to contain 11.88 per cent of moisture and 1.93 per cent of ash calculated on the completely dried drug.—Pharm. J. 1914, v. 92, p. 126; also Year-Book of Pharmacy, 1914, p. 366–367.

Hankey, William T.: Four samples of colchicum root were found to contain from 0.32 to 0.38 per cent of colchicine.—Proc. Ohio Pharm. Assoc. 1914, p. 49.

U. S. P. IX: One gm. of the powdered extract to represent 4 gm. of the drug. Fixed oils to be removed by purified petroleum benzin and dried starch to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 534, and Abstr. Prop. Changes, Part 3, 1914, p. 11.

COLCHICI SEMEN.

U. S. P. IX: The seeds should be dried; ovoid or irregular globular, several seeds cohering. Ash not exceeding 8 per cent. Modified method of assay.—J. Am. Pharm. Assoc. 1914, v. 3, p. 374, 990-991, and Abstr. Prop. Changes, Part 2, 1914, p. 16; Part 4, p. 7-8.

Hooper, David: Attempts to grow meadow saffron in India have not been successful. The monsoon rainfall on the outer Himalayan ranges is apparently too heavy for the plant to make progress.—Montreal Pharm. J. 1914, v. 25, p. 4.

Caesar & Loretz: The valuation of colchicum seed, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 104–105.

Vanderkleed, C. E.: Reports six assays of colchicum seed, found to vary from 0.52 to 1 per cent of colchicine.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Linke, H.: The pharmacopœia should include a limitation for ash and a requirement for extract content.—Apoth.-Ztg. 1914, v. 29, p. 663.

Maines, E. L.: Colchicum seed was found to contain from 2.23 to 2.51 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Colchicum seeds contained from 2.4 to 3.1 per cent of ash and from 26.2 to 35.8 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 33.

Neal, P. C.: Of six samples of colchicum examined, two were accepted and four were rejected.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

COLCHICINA.

E'we, G. E.: One sample of colchicine examined was found to lose 28.4 per cent of its weight at 90°. This loss was due chiefly to chloroform.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 135.

Vanderkleed, C. E.: The new Pharmacopœia will not only provide a specific test to guard against chloroform in colchicine, but will have a general provision that will prevent an article containing more than 5 per cent of foreign volatile matter from being official.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 136.

Souques, A.: Paralysis from colchicine in self-medication. A robust man of 50 took a proprietary remedy corresponding to a total of 31 mg. of colchicine.—(Bull. Acad. Méd. 1914, v. 78, No. 21-22.) J. Am. M. Assoc. 1914, v. 63, p. 202.

COLLODION.

U. S. P. IX: Directions for making modified by directing that the alcohol be added to the pyroxylin in a suitable bottle and the ether introduced subsequently.—J. Am. Pharm. Assoc. 1914, v. 3, p. 549, and Abstr. Prop. Changes, Part 3, 1914, p. 26.

Chandelon, Th.: A proposed method of making nitrocellulose for collodion.—Bull. Soc. Chim. Belg. 1914, v. 28, p. 13–23.

Knecht and Lipschitz: The action of strong nitric acid on cotton cellulose.—J. Soc. Chem. Ind. 1914, v. 33, p. 116–122.

Chandelon, Th.: On the viscosity of collodions.—Bull. Soc. Chim. Belg. 1914, v. 28, p. 24–32.

Curry, Gordon L.: The four official colodiums are all readily prepared in a retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 57.

COLLODIUM FLEXILE.

U. S. P. IX: Modified formula. Canada turpentine replaced by camphor.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1567, and Abstr. Prop. Changes, 1914, Part 3, p. 5.

COLOCYNTHIS.

U. S. P. IX: The dried pulp of the fruit with not more than 5 per cent of seeds nor more than 2 per cent of epicarp.—J. Am. Pharm. Assoc. 1914, v. 3, p. 374, and Abstr. Prop. Changes, Part 2, 1914, p. 16.

Anon.: An illustrated description of colocynth.—Southern Pharm. J. 1914, v. 7, p. 173.

Roberts, J. C.: A particularly bad lot of colocynth was received during the past year. It was weevil eaten and was composed largely of dark discolored pieces.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 136.

Rippetoe, J. R.: Three samples of colocynth pulp were found to contain from 12.95 to 14.15 per cent ash and from 0.59 to 1.21 per cent of petroleum ether.—Am. J. Pharm. 1914, v. 86, p. 438.

Mann, E. W.: Practically all samples of colocynth pulp examined were in accordance with the characters and tests now official. The ash content varied from 9.7 to 14.9 per cent: petroleum spirit extract from traces to 2.3 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 11.

J. D. Riedel, A.-G.: Colocynthis contained from 5.4 to 8.5 per cent of ash and from 31.2 to 36.1 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

U. S. P. IX: For compound extract of colocynth to direct the use of Curacao aloes, with a slight reduction in the amount of cardamom seed.—J. Am. Pharm. Assoc. 1914, v. 3, p. 535, and Abstr. Prop. Changes, Part 3, 1914, p. 12.

Bettencourt, M. F.: The use of colocynth in simple intestinal colic. Colocynth does not gripe when given according to the dictates of specific medication. Colocynth is applicable to the colocynth case and to no other.—Nat. Eclect. M. Assoc. Quart. 1914–15, v. 5, p. 332.

CONDURANGO.

U. S. P. IX: The dried bark of *Marsdenia condurango*. Description includes qualitative test. Ash not exceeding 12 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 374, and Abstr. Prop. Changes, Part 2, 1914, p. 16.

Linke, H.: Six samples of condurango yielded from 13.98 to 20.30 per cent of extractive and from 8.84 to 13.60 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 530.

Rippetoe, J. R.: Two samples of condurango were found to contain 12.90 and 19.86 per cent of alcohol (49 per cent) extract and 11.23 and 8.10 per cent of ash, respectively.—Am. J. Pharm. 1914, v. 86, p. 438.

J. D. Riedel, A.-G.: Condurango contained from 9.5 to 13.1 per cent of ash, and from 15.4 to 22.4 per cent of extract soluble in 1 part alcohol and 3 parts water.—Riedel's Berichte, 1914, p. 31.

Carlson, van de Erve, Lewis and Orr: The action of the so-called stomachics or bitters on the hunger mechanism. In therapeutic quantities the bitters, including condurango, have no effect on the gastric tonus and the gastric hunger contractions or on the parallel sensation of hunger.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 209–218.

CONIUM.

Henkel, Alice: An illustrated description of *Conium maculatum*, L.—Phys. Drug News, 1914, v. 9, p. 157; also Spatula, 1914, v. 20, p. 471.

Vanderkleed, C. E.: Reports one essay of conium, found to contain 0.65 per cent of coniine; above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Marden and Elliott: Trials to find the distribution ratio of coniine did not meet with much success, due to the failure to obtain results which checked well. Coniine alkaloid is so volatile that when 0.14 g. of this substance was exposed to the laboratory draft at the ordinary temperature it lost 93 per cent of its weight in one hour.—J. Ind. & Eng. Chem. 1914, v. 6, p. 931.

Alderman, Theodore Davis: Conium maculatum in nervous and mental diseases. It has replaced the use of narcotics in many cases of insanity.—Eclectic M. J. 1914, v. 74, p. 174–177.

CONVALLARIA.

U. S. P. IX: Description of rhizome elaborated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 375, and Abstr. Prop. Changes, Part 2, 1914, p. 17.

Lilly, J. K.: Difficulty has been experienced in obtaining prime well-cured roots of convallaria. Physiological assays have also indicated the general poor quality of this drug.—Proc. N. W. D. A. 1914, p. 263; also Oil, Paint & Drug. Rep. 1914, v. 86, September 30, p. 34.

Hamilton, H. C.: The menstruum for fluid extract of convallaria, U. S. P. VIII, is not entirely satisfactory. There are certain advantages to be gained by using a stronger alcoholic menstruum than that prescribed.—Am. J. Pharm. 1914, v. 86, p. 56–61.

Ramsay, C. F.: With the U. S. P. menstruum for fluid extract of convallaria only 50 per cent of the activity was at times obtained.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1647.

Holste, Arnold: The valuation of heart tonics; digitalis, strophanthus, strophanthin, cymarin.—Ztschr. exper. Path. u. Therap. 1914, v. 15, p. 385–408.

COPAIBA.

J. D. Riedel, A.-G.: The new varieties of copaiba from Manoas in Brazil. A comparison of the physical constants with those of true copaiba.—Pharm. Zentralh. 1914, v. 55, p. 350; also Riedel's Berichte, 1914, p. 27–29.

Gehe & Co.: The production of balsam of copaiba in Brazil has been materially increased due largely to the decrease in the value of rubber produced.—Handelsbericht, 1914, p. 49; also Südd. Apoth.-Ztg. 1914, v. 54, p. 239.

Deussen, Ernst: The examination of official copaiba. A criticism of the Ph. Germ. methods and requirements.—Arch. Pharm. 1914, v. 252, p. 590–600.

Rupp, E.: Outline of method for the determination of the saponification number of balsam of copaiba.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 302.

Herzog, J.: In the testing of copaiba, it is desirable to determine the optical rotation of the volatile oil.—Apoth.-Ztg. 1914, v. 29, p. 310.

Glickman, L. H.: The U. S. P. requirement that copaiba be completely soluble in petroleum benzin can probably not be met.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 136.

Caesar & Loretz: The methods of testing balsam of copaiba and the requirements of the several pharmacopœias.—Jahres-Ber. 1914, p. 51.

Roberts, J. G.: One lot of copaiba examined was of U. S. P. quality with the exception that it contained only 42 per cent of resin instead of not less than 50 per cent as required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 136.

Ewe, G. E.: A sample of Para copaiba assayed 27.6 per cent resin, required 1.3 cc. of seminormal potassium hydroxide solution in the acid resin test, had a specific gravity of 0.930, gave a large quantity of oily drops in the U. S. P. test for paraffin oils, but answered all other U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 136.

Hankey, William T.: Of 10 samples of copaiba examined, 3 were rejected. One of the rejected samples contained rosin and 1 paraffin.—Proc. Ohio Pharm. Assoc. 1914, p. 48.

Jensen, H. R.: Of 29 samples of copaiba examined, 11 were found to be unsatisfactory.—Evans' An. Notes, 1914, p. 28.

Mann, E. W.: The 1914 Ph. Brit. gives an approximate figure of 55 per cent for resin, with a minimum acid value of 75.6. The 15 samples examined show that while in nearly every instance the acid value is above this minimum figure, there are many samples which would be excluded on account of the excessive resin content. The specific gravity ranged from 0.974 to 0.998; resin content from 53.9 to 68.4 per cent and the acid value from 74.7 to 89.6.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 13.

J. D. Riedel, A.-G.: Report of examination of seven samples of capsules of copaiba balsam, with table showing the physical and chemical properties of the balsam found. Five of the seven samples were found to contain copaiba adulterated with Gurjun balsam or with resin or both.—Riedel's Berichte, 1914, p. 47.

Caesar & Loretz: Adulteration of copaiba with Gurjun balsam and colophony is still met with. The optical rotation of the volatile oil is a satisfactory test.—Jahres-Ber. 1914, p. 6–9.

A book review calls attention to a volume by Ernst Dussen on copaiba balsams and their adulteration.—Pharm. Ztg. 1914, v. 59, p. 343.

J. D. Riedel, A.-G.: A review of some of the recent literature relating to the production of exanthema by inferior qualities of copaiba.—Riedel's Berichte, 1914, p. 60.

CORIANDRUM.

U. S. P. IX: The fruit should contain not more than 5 per cent of other fruits, seeds, and other foreign matter. Description elaborated. Ash not exceeding 7.5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 376, and Abstr. Prop. Changes, Part 2, 1914, p. 18.

Alsberg, C. L.: Coriander should contain not less than 95 per cent of sound coriander seed and not more than 7 per cent of ash.—S. R. A.-Chem. 1914, p. 529; also Oil, Paint & Drug Rep. 1914, v. 85, July 27, p. 11.

Mann, E. W.: Six samples of the ground fruit of coriander yielded from 3.99 to 6.53 per cent of ash. One of these assayed for ether (0.720) extract, yielded 26.9 per cent (dried over H_2SO_4).—Ann. Rep. Southall Bros. & Barclay, 1914, p. 13.

Schimmel & Co.: The consumption of coriander, formerly so important, has fallen off greatly and the market generally is described as flat.—Schimmel & Co. Semi-Ann. Rep. April, 1914, p. 49–50.

CREOSOTUM.

Klason, Peter: An attempt at a theory of the dry distillation of wood.—J. Prakt. Chem. 1914, v. 90, p. 413–447.

E'we and Vanderkleed: Delicacy of the U. S. P. glycerin test for phenols in creosote.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 277.

Fernau, Albert: For the production of a crystalline mass from creosote, 2 cc. of an alcoholic potassium hydroxide, 1+4, will not suffice. Ten cc. of the solution should be used.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Noyes, C. R.: Coal tar creosote, used as a substitute for beechwood creosote, is a solution of phenol in water of any strength that the maker happens to decide upon.—Proc. Minnesota Pharm. Assoc. 1914, p. 193; also J. Am. Pharm. Assoc. 1914, v. 3, p. 856.

Jensen, H. R.: The 17 samples of beechwood creosote examined during the year have all been pure and of satisfactory strength; specific gravity, 1.077 to 1.081; refractive index, 1.5352 to 1.5412.—Evans' An. Notes, 1914, p. 30.

E'we, G. E.: Three samples of creosote examined were strictly U. S. P. in all particulars.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 136.

Cline, R. R. D.: Samples of creosote were found containing 80, 60, 40, and 30 per cent of guaiacol and one containing 20 per cent of guaiacol.—Proc. Texas Pharm. Assoc. 1914, p. 19.

U. S. P. IX: For creosote water to direct the use of recently boiled distilled water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 525, and Abstr. Prop. Changes, Part 3, 1914, p. 2.

Chase, Carroll: Creosote carbonate has a reputation for its supposed direct action in the pneumonic process.—Merck's Arch. 1914, v. 16, p. 69.

CRESOL.

U. S. P. IX: Modified formula. Specific gravity to read from 1.030 to 1.038 at 25°. Test for identity added and the test for hydrocarbons modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1567–1568, and Abstr. Prop. Changes, Part 6, 1914, p. 5–6.

Rupp, E.: Precautions to be observed in testing cresol by the official modification of the Raschig method.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 314.

Redman, Weith and Brock: A rapid volumetric method for determining *o*, *m*, and *p*-cresols, thymol, and phenol.—Chem. News, 1914, v. 110, p. 168–169, 176, 179.

German patent 268,780, December 24, 1911, covers process for separating *m* and *p*-cresols.—J. Soc. Chem. Ind. 1914, v. 33, p. 246. See also: p. 413.

Lefeldt, M.: The Ph. Germ. V test for the presence of naphthalene in cresol is unnecessarily stringent.—Pharm. Ztg. 1914, v. 59, p. 42.

Scoville, W. L.: Cresol varies considerably in color solubility, and in antiseptic value. Much of the commercial supply is below the U. S. P. standard.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1286.

E'we, G. E.: None of the nine samples of cresol examined had specific gravity between the U. S. P. limits of 1.036 and 1.038.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 137.

Patch, E. L.: In seven samples of cresol the specific gravity varied from 1.028 to 1.038.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287. See also Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Church and Weiss: Paraffin bodies in coal tar creosote and their bearing on specifications.—J. Ind. & Eng. Chem. 1914, v. 6, p. 396–398.

Raiford, L. Chas.: The action of halogen on $_4$-Nitro-*m*-cresol.—J. Am. Chem. Soc. 1914, v. 36, p. 670–680. See also Raiford and Leavell, p. 1498–1511.

Herzog and Kleinmichel: The examination of liquor cresolis saponatus according to the Ph. Germ. V. and the quantitative determination of cresol.—Apoth.-Ztg. 1914, v. 29, p. 402–403.

Goerlich, R.: The valuation of the Ph. Germ. V solution of cresol.—Pharm. Ztg. 1914, v. 59, p. 580–582.

Rost, E.: The action of disinfectants containing cresol, and of petroleum on animals.—Arb. k. Gsndsamte, 1914, v. 47, p. 240–251.

Graves and Kober: Tricresol as a substitute for toluene in enzyme work.—J. Am. Chem. Soc. 1914, v. 36, p. 742–758.

Gortner and Banta: Amphibian eggs and embryos are killed by a 0.05 per cent solution of trikresol within 72 hours.—Biochem. Bull. 1914, v. 3, p. 367.

Fitzpatrick, Atkinson and Zingher: The comparative importance of pressure and of toxicity of trikresol in subdural injections of sera.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 182–183. See also Auer, John: J. Am. M. Assoc. 1914, v. 62, p. 1799.

Collins and Hall: The use of coal tar creosote and naphthalene for preserving wooden fences.—J. Soc. Chem. Ind. 1914, v. 33, p. 466–468.

CRETA PREPARATA.

E'we, G. E.: Two samples of prepared chalk contained 1.15 per cent and 1.20 per cent, respectively, of matter insoluble in acids. They were otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

CROCUS.

Geare, R. I.: The saffron of commerce. Outline description of the methods employed in preparing it for market.—Am. Druggist, 1914, v. 62, p. 12. See also Blaque, G.: Bull. sc. pharmacol. 1914, v. 21, p. 176–179.

Augustin, Béla: The cultivation of saffron in Hungary; a review.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 287–288.

Fromme, G.: Observations on the valuation of crocus. The determination of the insoluble constituents and the determination of adulterants.—Apoth.-Ztg. 1914, v. 29, p. 737–739. See also Cæsar & Loretz: Jahres-Ber. 1914, p. 63–67, and p. 12–23.

Nestler, A.: A new method for the examination of saffron. Illustrated description of microcrystals.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 28, p. 264–268.

Dichgans, H.: A simple method for the detection of magnesium sulphate in saffron by taking advantage of the fact that hydrated chloral induces crystallization of magnesium sulphate, in a mixture of water and glycerin.—Apoth.-Ztg. 1914, v. 29, p. 407. See also Nestler, A.: Ztschr. unters. Nahr. u. Genussm. 1914, v. 27, p. 388–391, and Arch. Chem. u. Micros. 1914, v. 7, p. 67–72.

Verda, A.: Observations on the use of phosphomolybdic acid as a reagent in the chemical and microchemical detection of adulteration of saffron.—Chem.-Ztg. 1914, v. 38, p. 325–327; also Schweiz. Apoth.-Ztg. 1914, v. 52, p. 350–353, 365–369.

Decker, Fritz: Contribution to our knowledge of crocetin, the coloring matter of saffron.—Arch. Pharm. 1914, v. 252, p. 139–160.

Križižan, R.: Contribution on the examination of saffron; the determination of invert sugar.—Ztschr. öffentl. Chem. 1914, v. 20, p. 109–114, 121–124.

Gehe & Co.: The examination of several authentic samples of saffron showed the presence of boric acid as a natural constituent.—Pharm. Zentralh. 1914, v. 55, p. 398.

Lilly, J. K.: Several samples of Spanish saffron consisted of the stamens of crocus sativus instead of the stigmas.—Proc. N. W. D. A. 1914, p. 264; also Oil, Paint & Drug. Rep. 1914, v. 86, September 30, p. 35.

Editorial: The detection of adulteration in saffron. Pure saffron was found to contain from 4.2 to 6.3 per cent of ash of the dry saffron, while the adulterated article was found to contain from 8.4 to 34.8

per cent of ash on the dry product.—Brit. & Col. Drug. 1914, v. 65, p. 146.

Maines, E. L.: Saffron was found to contain from 4.52 to 6.98 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Mann, E. W.: In 1 sample only, out of 17 samples of saffron tested, was any excess of mineral matter present; in this 1 the figure was 8.14 per cent. All others were included between 3.30 and 6.92 per cent (calculated on the dry saffron).—Ann. Rep. Southall Bros. & Barclay, 1914, p. 22.

Jensen, H. R.: Twenty-two samples of saffron were examined, most of which were of average quality. One sample contained a marked amount of pollen, and four showed variations of color intensification. One sample was heavily adulterated and dyed.—Evans' An. Notes, 1914, p. 58.

J. D. Riedel, A.-G.: Saffron contained from 4.7 to 5.8 per cent of ash, and from 61.7 to 66.4 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

CUBEBA.

U. S. P. IX: The dried, full-grown, unripe fruit with not more than 5 per cent of stems and other foreign matter.—J. Am. Pharm. Assoc. 1914, v. 3, p. 376, and Abstr. Prop. Changes, Part 2, 1914, p. 18.

Gehe & Co.: Table showing the amount of cubebs available during the years 1903 to 1912, inclusive.—Handelsbericht, 1914, p. 71.

Alsberg, C. L.: Analyses have been made of a large number of samples of cubeb berries to set standards for the composition of the pure article and to detect the admixture of inferior or exhausted berries.—Am. Food J. 1914, v. 9, p. 21.

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Maines, E. L.: Cubeb berries were found to contain from 6.03 to 7.87 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Scoville, W. L.: Cubeb ran quite uniform during the past year, yielding 18.1 per cent to 22 per cent oleoresin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

J. D. Riedel, A.-G.: Cubebs contained from 5 to 8.5 per cent of ash and from 11.1 to 14.7 per cent of extract soluble in 1 part ether and 1 part alcohol.—Riedel's Berichte, 1914, p. 31.

Maines and Gardner: In the manufacture of extract of cubebs the oil of cubebs can be obtained as a by-product by simply redistilling the exhausted drug.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1327; also Merck's Rep. 1914, v. 23, p. 275.

Vanderkleed, C. E.: Reports six assays of cubebs, found to vary from 13.9 to 19.8 per cent of oleoresin; five above and one below standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

E'we, G. E.: One lot of oleoresin of cubebs contained the waxy deposit which the U. S. P. directs should be rejected.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 152.

CUPRI SULPHAS.

Fonzes, Ciacon: The basic sulphates of copper.—J. Soc. chim. France, 1914, v. 15, p. 723–727.

Cundall and Fairgrieve: The action of sulphuric acid on copper.—J. Chem. Soc. Lond. 1914, v. 105, p. 60–63.

Mann, E. W.: Somewhat excessive proportions of iron have characterized three of the samples of the commercial variety of copper sulphate examined during the year.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 45.

Hill, C. A.: Of 50 samples of copper sulphate examined during the years 1910 to 1913, inclusive, the iron was found to vary from 0 to 0.2 per cent. The percentage of samples conforming with the official requirements varied from 75 per cent in 1912 to 100 per cent in 1911.—Chem. & Drug. 1914, v. 85, p. 18.

Anon.: The quickest emetic one can administer to child or adult is not apomorphine, but copper sulphate, one or two grains dissolved in a teaspoonful or two of water. It usually acts instantly.—Critic and Guide, 1914, v. 17, p. 28.

DECOCTA.

U. S. P. IX: Decoctions shall be freshly prepared from the drug.—J. Am. Pharm. Assoc. 1914, v. 3, p. 550, and Abstr. Prop. Changes, Part 3, 1914, p. 27.

Curry, Gordon L.: The official decoctions for which a type formula only is given should be extemporaneously prepared in the retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 57.

Jørgensen, Chr. F.: Decoctions and infusions; a comparative study of the results obtained by the methods employed in the Danish and German Pharmacopœias.—Arch. Pharm. og Chem. Copenhagen, 1914, v. 21, p. 225–232.

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Jensen, H. R.: White dextrin is obtained by hydrolysis at temperatures much lower than that used for the yellow; it is a variable product and always contains a quantity of unaltered starch.—Evans' An. Notes, 1914, p. 30.

Lewis, W. K.: The solubility of dextrin. Dextrin is a complex body, the components of which vary in solubility, and it is easily possible that the behavior on treatment with increasing amounts of water is due to the solution of increasingly insoluble components.—J. Ind. & Eng. Chem. 1914, v. 6, p. 308–309.

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Kollo, Konstantin: Ampoules of diacetyl morphine hydrochloride should be prepared in sterile apparatus and may be filtered.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Brown, L. A.: Three samples of heroin hydrochloride tablets analyzed; two passed and one adulterated. Samples ran in strength from 100.7 to 73.6 per cent of the declared strength.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Osterlund, O. W.: It appears that cocaine fiends get practically the same results from heroin as from cocaine. They crush the tablet and snuff it.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 218. See also Foust, James: Bull. Pennsylvania D. & F. Div. 1914, v. 12, Nos. 11 and 12, p. 15, and Editorial: Bull. Pharm. 1914, v. 28, p. 3.

Editorial: The Philadelphia coroner has had five deaths within a year from heroin.—Ellingwood's Therap. 1914, v. 8, p. 30.

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Bartholomew, E. T.: Concerning the presence of diastase in certain red algæ.—Bot. Gaz. 1914, v. 57, p. 136–147.

Baker and Hulton: The action of diastase on starch granules. Part 1. A preliminary report.—J. Chem. Soc. Lond. 1914, v. 105, p. 1529–1536; also Proc. Chem. Soc. 1914, v. 30, p. 133–134.

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Glickman, L. H.: The four samples of diastase examined assayed 1,250 in starch converting power in two hours.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 137.

DIGITALIS.

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Hamilton, H. C.: Anyone who has tried the U. S. P. VIII menstrua for digitalis has found it unsatisfactory from a pharmaceutical point of view, to say nothing of the loss in potency of the preparation.—Am. J. Pharm. 1914, v. 86, p. 56–61.

Ramsay, C. F.: Using the menstruum directed by the U. S. P. for fluid extract of digitalis it is impossible to get the full activity of the drug.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1647.

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Guyer, R. Glade: Comparative tests of tinctures made from the lamina and from the petioles, midribs, and veins of digitalis leaves.

The preparations, although they differed somewhat in specific gravity, did not differ markedly in their effect.—Pharm. J. 1914, v. 92, p. 165. For discussion see p. 187; also Chem. & Drug. 1914, v. 84, p. 240–241.

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U. S. P. IX: Title changed to Elixir Glycyrrhizæ and the amount of fluid extract of glycyrrhiza changed from 120 cc. to 125 cc. per 1000 cc.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1568, and Abstr. Prop. Changes, Part 6, 1914, p. 6.

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Allen, R. M.: Considerable confusion exists among druggists as to what should be dispensed for elixir iron, quinine, and strychnine. Three official and a number of unofficial formulas are employed.—Circ. Kentucky Agric. Exper. Sta. 1914, March 1, p. 1.

Rippetoe, J. R.: Elixir iron, quinine, and strychnine phosphates, U. S. P., is a splendid example of the manufacturer's problems and for that matter the retail druggist's also. Every issue of the various drug journals brings forth some new suggestion until it seems everyone must have a different method for making it.—Am. J. Pharm. 1914, v. 86, p. 116.

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Todd, A. R.: Of four samples of elixir of iron, quinine, and strychnine phosphate examined, two were found to be adulterated.—Rep. Michigan D. & F. Com. 1914, p. 176.

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Anon.: No one can make a first-class elixir from a volatile oil that has been partly spoiled. Yet deteriorated volatile oils are being used every day for that purpose.—N. A. R. D. Notes, 1914, v. 18, p. 481.

Compound elixir of almond.—Amos, W. S.: A sample of compound elixir of almond made May 15, 1912, has darkened slightly. The odor is that of orange flower water—"heavy" and unpleasant, the taste is at first pleasant but weak—afterwards that of the orange flower water and vanillin combination.—J. Am. Pharm. Assoc. 1914, v. 3, p. 322.

Compound elixir of cardamon.—Amos, W. S.: The proposed compound elixir of cardamon, made May 15, 1912, is cloudy, with precipitate. The taste is not unpleasant, but is too weak.—J. Am. Pharm. Assoc. 1914, v. 3, p. 322.

Elixir digestivum compositum.—Williams, Ed. E.: Elixir digestivum compound is an incongruous mixture, and should be made either an active pepsin compound or an active pancreatin compound. It is not practicable to make it both.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Nixon, C. F.: Modified formula for compound digestive elixir.—Apothecary, 1914, v. 26, January, p. 20.

"Harmat": Elixir of Lactated Pepsin should be included as one of the subtitles under Elixir Digestivum Compositum, N. F.—N. R. A. D. Notes, 1914, v. 18, p. 945.

Snider, H. F.: Elixir Lactated Pepsin is one of the most indefinite preparations on the market. It may be bought at various prices and is labeled, representing 48, 80, 160 grains of Compound Pepsin Powder or Lactated Pepsin to the ounce. The product labeled 80 or 160 grains may be bought just as cheap as that labeled 40 grains.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 193.

Elixir of formates.—Amos, W. S.: There is not sufficient demand for the elixirs of formates to justify their inclusion in the National Formulary.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

Elixir gentianæ.—Reum, Arthur: A modified process for making elixir of gentian, N. F.—Pacific Pharm. 1914, v. 8, p. 41–42.

Elixir gentianæ glycerinatum.—Kaiser, W. F.: A modified formula for N. F. glycerinated elixir of gentian to be made directly from the drugs.—Bull. Pharm. 1914, v. 28, p. 481.

Nixon, C. F.: For glycerinated elixir of gentian the acetic ether and the saccharin should be reduced in quantity.—Apothecary, 1914, v. 26, January, p. 21.

Elixir of glycerophosphates.—Williams, Ed. E.: Elixir glycerophosphates of the N. F. deposits a crystalline precipitate on standing. This can be remedied by substituting 10 cc. of lactic acid for the 8 cc. of phosphoric acid of the formula.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Hague, George W.: Elixir of glycerophosphates when stored in white bottles produces a heavy precipitate on standing, while that stored in amber-colored bottles does not. This elixir should, therefore, be directed to be kept in amber-colored bottles.—Merck's Rep. 1914, v. 23, p. 33. See also Anon.: Am. Druggist, 1914, v. 62, p. 214.

Aqueous elixir of glycyrrhiza.—Amos, W. S.: Aqueous elixir of licorice made May 15, 1912, has kept perfectly. It is suggested that the fluid extract of licorice of the formula be replaced by the fluid glycerate to be in keeping with the title, which suggests no alcohol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 322.

Elixir paraldehydi.—Williams, Ed. E.: Elixir of paraldehyde, N. F., separates into two layers on standing. If the amount of alcohol is increased to 335 cc. a permanent solution results.—Proc. Wisconsin Pharm. Asso. 1914, p. 23.

Elixir pepsini et bismuthi.—Hague, George W.: The N. F. formula for elixir of pepsin and bismuth permits the use of caramel coloring. This is a mistake; official preparations should be colored or not colored, so as to insure their being uniform.—Merck's Rep. 1914, v. 23, p. 33.

Elixir potassii bromidi.—Hague, George W.: The N. F. formula for elixir of potassium bromide permits the addition of tincture of cudbear as a color. This is a mistake; official preparations should be colored or not colored, so as to insure their being uniform.—Merck's Rep. 1914, v. 23, p. 33.

Lythgoe, Hermann C.: Of 20 samples of elixir of potassium bromide examined, 3 were below the National Formulary strength, containing, respectively, 71, 75, and 78 per cent of the required amount of potassium bromide.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 408.

Red elixir.—Amos, W. S.: The proposed red elixir does not contain enough color, and it is suggested that the amount of cudbear be doubled, so that the elixir may be diluted, as in prescription work, and the color still be noticeable.—J. Am. Pharm. Assoc. 1914, v. 3, p. 322.

Compound elixir of sodium salicylate.—Amos, W. S.: Compound elixir of sodium salicylate precipitates and the taste is objectionable. It should not be included in the new formulary.—J. Am. Pharm. Assoc. 1914, v. 3, p. 322.

Anon.: The elixir of sodium salicylate, N. F., is liable to become discolored with age and should always be freshly prepared when wanted.—N. A. R. D. Notes, 1914, v. 18, p. 211.

Elixir terpini hydratis.—Norwood, T. W.: The addition of sirup to elixir of terpene hydrate is unnecessary and the use of compound spirit of orange as a flavoring is recommended.—Drug. Circ. 1914, v. 58, p. 390.

Williams, Ed. E.: The official elixir terpin hydrate contains too much sirup and the sugar is thrown out of solution by the alcohol in the formula.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Compound elixir of vanillin.—Amos, W. S.: The proposed compound elixir of vanillin has darkened to a caramel brown. The taste is not pleasant. This is considered the poorest elixir of any proposed.—J. Am. Pharm. Assoc. 1914, v. 3, p. 322.

EMPLASTRA.

Curry, Gordon L.: All of the seven official plasters should be made by the retail druggist.—Proc. Kentucky Pharm. Assoc. 1914, p. 57.

Editorial: All self-respecting registered chemists should refuse to sell diachylon to anyone. Its legitimate use as a plaster is so trifling nowadays that the public would suffer little inconvenience if they could not buy it from pharmacists.—Chem. & Drug. 1914, v. 84, p. 458. See also Chem. & Drug. Australas. 1914, v. 29, p. 204.

EMULSA.

U. S. P. IX: Slight change in the directions for making emulsion of cod liver oil.—J. Am. Pharm. Assoc. 1914, v. 3, p. 550, and Abstr. Prop. Changes, Part 3, 1914, p. 27.

Anon.: Emulsions and methods of making them.—Pharm. J. 1914, v. 93, p. 23–25.

LaWall and Forman: The analysis of emulsions.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1444–1445. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 364.

Löfl: For the exact determination of fats in emulsions, only the Soxhlet extraction method gives uniformly reliable results. All other methods are uncertain.—Südd. Apoth.-Ztg. 1914, v. 54, p. 398.

Curry, Gordon L.: All of the six official emulsions can be practically prepared in the retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 57.

EPINEPHRINE.

Anon.: Adrenalin, or lævo-methylamino-ethanol-catechol, a new addition to the Ph. Brit. May be obtained, it is stated, from the suprarenal glands of animals.—Chem. & Drug. 1914, v. 85, p. 487.

Elliott, T. R.: The adrenal glands; a review.—Brit. M. J. 1914, v. 1, p. 1393–1397.

Seidell and Fenger: Variation in the epinephrine content of suprarenal glands.—Bull. Hyg. Lab. No. 100, p. 55–66.

Beckwith, C. P.: The pharmacy of adrenalin. A review of the chemistry of the substance, with some remarks on the incompatability.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1547–1554.

Rowe, L. W.: The sterilization of adrenalin solutions. Adrenalin chloride solution in ampoules can be heated continuously for three hours to the temperature of boiling water without any loss of activity.—Am. J. Pharm. 1914, v. 86, p. 145–149.

Anon.: The sterilization of ampoules of morphine and suprarenin solutions by means of heat.—Pharm. Post. 1914, v. 47, p. 93.

Frey, Ernst: An experimental study to determine the destruction of adrenalin by iodine in the organism.—Arch. exper. Path. u. Pharmakol. 1914, v. 76, p. 65–80.

Pilcher, J. D.: The submucosa of the nasal passage forms an excellent absorbing surface, at least for epinephrine, and probably, therefore, for other drugs.—J. Am. M. Assoc. 1914, v. 63, p. 208–209.

Sugimoto, T.: The action of adrenalin on the isolated uterus of the guinea pig. Arch. exper. Path. u. Pharmakol. 1914, v. 74, p. 29.

Will and Crawford: Note on the action of epinephrine on the guinea pig uterus.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 126–127.

Gunn and Gunn: The action of certain drugs on the uterus of the guinea pig and of the rat.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 527–538.

Macht, D. I.: The action of drugs on the isolated pulmonary artery. Epinephrine is practically the only drug whose action has been studied by previous investigators.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 16.

Falta, W.: Observations on the influence of adrenalin on alantoin elimination in the dog.—Ztchr. exper. Path. u. Therap. 1914, v. 15, p. 356–358.

Niculescu, Petre: The relation of the physiological actions of hypophysis extract, adrenin, ergot preparations, and imidazolyl-ethylamine.—Ztschr. exper. Path. u. Therap. 1914, v. 15, p. 1–11. See also Borruttau, H., p. 11–12.

Moog, O.: On the mutual synergism of normal serum and of adrenalin in the frog.—Arch. exper. Path. u. Pharmakol. 1914, v. 77, p. 346–360.

van Leersum and Rassers: Contribution to our knowledge of experimental adrenalin atheroma.—Ztschr. exper. Path. u. Therap. 1914, v. 16, p. 230–236.

Lusk, Graham: The influence of epinephrine on carbohydrate metabolism.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 49–50.

Boise, Eugene: The heart in shock, and the action of epinephrine on the heart.—New York M. J. 1914, v. 99, p. 983–987.

Miller, W.: A note on the effect of the hypodermic injection of adrenalin chloride solution.—Lancet, 1914, v. 187, p. 158–159.

Roth, O.: On the reactions of the human heart to adrenalin.—Deutsch. med. Wchnschr. 1914, v. 40, p. 905–907. See also Rohmer, P.: Münch. med. Wchnschr. 1914, v. 61, p. 1336–1337.

Watson, Allan: Some observations on the effect of hypodermic injections of adrenalin on the blood pressure.—Practitioner, 1914, v. 92, p. 94–99.

Swetschnikow, W. A.: On the several requirements of the adrenalin action on peripheral vessels.—Arch. ges. Physiol. 1914, v. 157, p. 471–485.

Waller, Harold W. L.: A note on adrenalin chloride in the treatment of spasmodic asthma.—Lancet, 1914, v. 187, p. 445.

Braun, Israel: Adrenalin chloride has been found of great use in promptly checking an asthmatic attack in bronchial asthma.—Merck's Arch. 1914, v. 16, p. 106.

van Zandt, I. L.: Adrenalin chloride in exophthalmic goitre.—Am. Med. 1914, v. 20, p. 300–301.

Guber, A.: The use of adrenalin (suprarenin) as a physiologic antidote for morphine.—Arch. exper. Path. u. Pharmakol. 1914, v. 75, p. 333–346. See also Scoville, W. L.: Bull. Pharm. 1914, v. 28, p. 526.

Löwy, J.: Dangerous action of epinephrine in a case of Addison's disease.—(Med. Klin. v. 10, November 1, No. 44). J. Am. M. Assoc. 1914, v. 63, p. 2167.

Riethmüller, Richard H.: The practitioner can not be too urgently warned to refrain from the use of stale novocain-suprarenin solutions, which may produce very serious results.—Dental Cosmos, 1914, v. 56, p. 1324.

For additional references on adrenalin see Index Med.; J. Am. M. Assoc.; Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; Zentralbl. Biochem. u. Biophys.; Zentralbl. exper. Med.

ERGOTA.

U. S. P., IX: The carefully dried sclerotium of *Claviceps purpurea*, with not more than 5 per cent of harmless seeds, fruits, and other foreign matter. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 377, and Abstr. Prop. Changes, Part 2, 1914, p. 19.

Gehe & Co.: The production of ergot during the year 1913 was again normal and prices have been correspondingly reduced.—Handelsbericht, 1914, p. 116.

Tunmann, O.: There is no distinct market for ergot apart from New York, which imports annually, directly from Spain and Russia, from 60.000 to 100.000 kilograms of the drug. The Hamburg statistics do not consider ergot of sufficient importance to be listed separately.—Apoth.-Ztg. 1914, v. 29, p. 92.

Mann, E. W.: A very high average of water-soluble matter was reached by the 28 samples of ergot examined during the two years, the figures also affording evidence of a very wide variation. The water-soluble matter ranged from 11.7 to 23.7 per cent; average 17.5 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 14.

Linke, H.: The chemistry of ergot is not sufficiently advanced to permit of a definite standardization. The cornutine content does not give a satisfactory indication of the physiological activity of the drug.—Apoth.-Ztg. 1914, v. 29, p. 662–663.

Helch, Hans: The qualitative determination of cornutine would be an additional safeguard in connection with preparations of ergot.—Pharm. Post, 1914, v. 47, p. 580.

Wastenson, Hugo: The cornutine content of Swedish ergot and of the preparations made therefrom.—Svensk farm. Tidskr. 1914, v. 18, p. 602–605.

Vanderkleed, C. E.: Reports four assays of ergot found to vary from 0.18 to 0.31 per cent of cornutine.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Caesar & Loretz: Six samples of ergot were found to contain from 0.150 to 0.313 per cent of cornutine. Three samples of German ergot were found to contain from 0.017 to 0.050 per cent of cornutine.—Jahres.-Ber. 1914, p. 29; also Pharm. Zentralh. 1914, v. 55, p. 519.

Maines, E. L.: Ergot was found to contain from 3.40 to 4.16 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Ergot contained from 2.6 to 3.4 per cent of ash and from 14.4 to 19.9 per cent of extract soluble in 1 part alcohol and 4 parts water.—Riedel's Berichte, 1914, p. 33.

Anon.: The second supplement to the Ph. Ndl. IV is to include the international standard extract of ergot.—Pharm. Weekblad. 1914, v. 51, p. 84.

Johnson, G.: The extract of ergot of the Ph. Norv. IV.—Norges Apotek. Tidsskr. 1914, v. 22, p. 12.

Strode, Sylvanus E.: Of two samples of fluid extract of ergot examined, one was not passed.—Rep. Ohio D. & F. Div. 1914, p. 118.

Caesar & Loretz: One sample of fluid extract of ergot was found to have a specific gravity of 1.091 and contain 2.70 per cent ash and 24.45 per cent of extract.—Jahres-Ber. 1914, p. 38.

E'we and Vanderkleed: Fluid extract of ergot was found to form precipitates containing lead.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1685.

Duncan, Chester A.: Popular review of the methods employed in the physiological standardization of ergot.—Southern Pharm. J. 1914, v. 6, p. 343.

Pittenger and Vanderkleed: A new uterus-contracting method of testing ergot, with comparison with the blood-pressure method.—J. Am. Pharm. Assoc. 1914, v. 3, p. 925–932.

Caesar & Loretz: The valuation of ergot, with tables showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 100–102. See also p. 27.

Salant and Harris: Some observations on the action of ergot.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 21–22. See also Salant and Hecht: J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 517.

Haskell, Chas. C.: The physiological activity of "Ergotin" and powdered extract of ergot.—J. Am. Pharm. Assoc. 1914, v. 3, p. 786–791.

Guggenheim, M.: The action of beta-imidazolylethylamine on the human uterus.—Therap. Monatsh. 1914, v. 28, p. 174–175.

Niculescu, Petre: The relation of the physiological actions of hypophysis extract, adrenin, ergot preparations and imidazolylethyl amine.—Ztschr. exper. Path. u. Therap. 1914, v. 15, p. 1–11. See also Borruttau, H., p. 11–12, and Frölich and Pick: Arch. exper. Path. u. Pharmakol. 1914, v. 74, p. 114–118.

Jackson, D. E.: The action of certain drugs on the bronchioles. Ergotoxine possesses no very marked specific action of its own on the bronchioles.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 479–510.

Morse, W. H.: An active preparation of ergot will facilitate labor, control hemorrhage, and meet the rationale of a widely diversified indication.—Nat. Eclect. M. Assoc. Quart. 1914–15, v. 5, p. 247–249.

Rosenbloom and Schildecker: The successful isolation of ergotinin crystals from certain organs in a case of acute ergot poisoning.—J. Am. M. Assoc. 1914, v. 63, p. 1203–1204.

ERIODICTYON.

U. S. P. IX: The leaves may include not more than 5 per cent of stems or other foreign matter.—J. Am. Pharm. Assoc. 1914, v. 3, p. 378, and Abstr. Prop. Changes, Part 2, 1914, p. 20.

Editorial: California balm grows well on the waste and arid hillsides along the coast. It could be grown where little else would thrive. Gathering and marketing is easy and simple.—Pacific Pharm. 1914, v. 7, p. 297.

ESSENTIA PEPSINI, N. F.

Norwood, T. W.: A reduction of the amount of wine in essence of pepsin to 18 ounces or less per gallon would give it less of the appearance and taste of wine of pepsin.—Drug. Circ. 1914, v. 58, p. 390.

Whitney, M. N.: In nine samples of essence of pepsin examined, the albumen converted by 4 cc. of the preparation was found to vary from 1,330 to 3,330. Only one of the preparations was below 3,000.—Proc. Missouri Pharm. Assoc. 1914, p. 104.

Zieffle, Adolph: Of 77 samples of essence of pepsin, all but 3 were found to be less than 90 per cent of the official strength.—Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 132–134.

Congdon, Leon A.: Six samples of essence of pepsin; all not standard.—Rep. Kansas Bd. Health, 1914, p. 100.

Todd, A. R.: Six samples of essence of pepsin were examined, all of which were found to be adulterated or illegal.—Bull. Michigan D. & F. Dept. 1914, January–February, p. 17, July–August, p. 26, September–October, p. 16.

Todd, A. R.: Of 14 samples of essence of pepsin examined, 3 were found to be adulterated.—Rep. Michigan D. & F. Com. 1914, p. 176.

ETHYL-MORPHINE HYDROCHLORIDE.

Anon.: The second supplement to the Ph. Ndl. IV describes di-ethylmorphine hydrochloride, or dionin, as melting at about 120°. On drying at 105°, it should lose not less than 8, nor more than 10 per cent of its weight.—Pharm. Post, 1914, v. 47, p. 125. See also Pharm. Weekblad, 1914, v. 51, p. 79–80.

Jensen, H. R.: The only sample of ethyl morphine hydrochloride tested had an apparent melting point at 123° and was insoluble in ether.—Evans' An. Notes, 1914, v. 31.

Linke, H.: The red color produced by the action of nitric and sulphuric acid with ferric chloride appears only after the mixture is allowed to cool.—Apoth.-Ztg. 1914, v. 29, p. 683.

Kollo, Konstantin: Ampoules of ethyl morphine hydrochloride may be Tyndallized for three days at from 90° to 100°. Many of the available commercial products are not absolutely neutral in reaction and will not yield a colorless solution.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

EUCALYPTOL.

Dodge, Francis D.: A further note on the determination of cineol. The phosphoric acid and the resorcinol processes are of little use in the presence of camphor or terpineol. The permanganate method, as described, is not satisfactory, for oils containing less than 50 per cent of cineol.—J. Ind. & Eng. Chem. 1914, v. 6, p. 863–864. See also Pharm. Zentralh. 1914, v. 55, p. 729.

Turner and Holmes: For the determination of cineol, suggest an arsenic acid quantitative method which depends upon the formation of cineol arsenate.—Pharm. Era, 1914, v. 47, p. 574.

E'we, G. E.: One sample of eucalyptol examined contained a little eucalyptus oil. Its specific gravity was 0.9196, instead of 0.9210.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 138.

Jensen, H. R.: One sample of eucalyptol had: Specific gravity, 0.9285; refractive index, 1.458; optical rotation, 0°.—Evans' An. Notes, 1914, p. 31.

Fromm and Fluck: Iodine containing derivatives of cineol.—Ann. Chem. 1914, v. 405, p. 175–180.

Berliner: The treatment of pneumonia, pleuritis, and bronchitis with menthol and eucalyptol.—Deutsch. med. Wchnschr. 1914, v. 40, p. 2100.

EUCALYPTUS.

U. S. P. IX: The leaves may include not more than 3 per cent of stems, fruits, and other foreign matter.—J. Am. Pharm. Assoc. 1914, v. 3, p. 378, and Abstr. Prop. Changes, Part 2, 1914, p. 20.

Editorial: The Australian Government and eucalyptus cultivation.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 5.

Baker and Smith: The correlation between the specific characters of the Tasmanian and Australian eucalyptus. An abstract.—Chem. News, 1914, v. 110, p. 126.

A book review calls attention to Parts XVIII to XXI, inclusive, of a volume entitled "A Critical Revision of the Genus Euclyptus," by J. H. Maiden.—Am. J. Pharm. 1914, v. 86, p. 479.

EUGENOL.

Albright, Alan R.: The hydrogen number of eugenol was found to be 134.4; the per cent of active constituent, 98.3; theoretical per cent of active constituent, 100.—J. Am. Chem. Soc. 1914, v. 36, p. 2202.

EUONYMUS.

U. S. P. IX: The bark may not include more than 3 per cent of wood and other foreign matter. The amount of calcium oxalate in different specimens shows some variation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 379, and Abstr. Prop. Changes, Part 2, 1914, p. 21.

Rippetoe, J. R.: One sample of euonymus was found to contain 18.73 per cent of alcohol (73 per cent) extract and 7.70 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 438.

U. S. P. IX: One gm. of the powdered extract to represent 4 gm. of the drug. Dried starch to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 535, and Abstr. Prop. Changes, Part 3, 1914, p. 12.

Blackwood, Alexander L.: Euonymus atropurpureus; observations on the action of this agent on 12 persons.—J. Am. Inst. Homœop. 1914, v. 7, p. 420–424.

EUPATORIUM.

Rippetoe, J. R.: One sample of eupatorium was found to contain 22.80 per cent of alcohol (49 per cent) extract and 9.07 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

EXTRACTA.

U. S. P. IX: Changes and new standards and requirements for official extracts with directions for making powdered extracts.—J. Am. Pharm. Assoc. 1914, v. 3, p. 533–538, and Abstr. Prop. Changes, Part 3, 1914, p. 10–15.

Mittelbach, William: In the new Pharmacopœia most of the old solid extracts in mass form will be replaced by the powdered form. This is good; powdered extracts are more satisfactory in all respects.—Proc. Missouri Pharm. Assoc. 1914, p. 106.

Grosh, Daniel M.: The commercial production of powdered extracts.—Nat. Druggist, 1914, v. 44, p. 452.

Curry, Gordon L.: Of the official extracts, the aqueous extracts and those made by evaporation of the fluid extract should be made in the retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 57. See also Llewellyn, H. D.: Proc. Missouri Pharm. Assoc 1914, p. 142.

Anon.: The introduction of the use of the vacuum pan in the making of extracts.—Pharm. Era, 1914, v. 47, p. 264–265.

Fernau, Albert: Tinned copper pans usually contaminate the extract with tin. Apparatus of aluminum is to be preferred for the making of vegetable extracts.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 242.

Steinhorst, H.: The testing of official Ph. Germ. V extracts for heavy metals and the need for avoiding containers of tin and lead.—Apoth.-Ztg. 1914, v. 29, p. 39.

Anselmino, O.: An illustrated description of an apparatus for determining the water content of extracts.—Arb. Pharm. Inst. Berl. 1914, p. 237–238.

Anon.: A compilation of criticisms of the Ph. Germ. V extracts.—Pharm. Zentralh. 1914, v. 55, p. 601ff.

Pescitelli, Luigi: The use of tinctures and of extracts in therapy.—Boll. chim.-farm. 1914, v. 53, p. 335–343.

Extract of beef.—Cook, F. C.: Partition of the nitrogen of plant, yeast, and meat extracts.—J. Am. Chem. Soc. 1914, v. 36, p. 1551–1556.

Sauer, Fr. G.: Nature and composition of Liebig's meat extract.—Pharm. Ztg. 1914, v. 59, p. 866–867.

Scoville, W. L.: Beef extract contained from 7.4 to 17.88 per cent of salt.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Thompson, W. H.: Nutrition and meat extracts. A controversy.—Brit. M. J. 1914, v. 2, p. 738. See also Thompson, W. H., p. 902; Sohn, Charles E., p. 1000; Haddon, John, p. 1088.

Extractum ferri pomatum, N. F.—Rupp, E.: Outline of method for determining the iron content of ferrated extract of apples.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 314.

FEL BOVIS.

E'we, G. E.: Of 11 lots of powdered oxgall examined, 5 contained large quantities of corn starch, 1 as much as 13.5 per cent; the other 8 lots were only partly soluble in water. Powdered oxgall seems to be simply dried without preparation with alcohol.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 152.

U. S. P. IX: Powdered extract of oxgall to replace purified oxgall. One gm. of powdered extract to represent 8 gms. of oxgall. Dried starch is to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 535, and Abstr. Prop. Changes, Part 3, 1914, p, 12.

FERRI CARBONAS SACCHARATUS.

Hill, C. A.: Of 11 samples of saccharated ferrous carbonate examined during the years 1912 and 1913 the arsenic content varied from 0.4 to 7 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

FERRI CHLORIDUM.

U. S. P. IX: Liquor ferri chloridi to include test for absence of salts and fixed alkalies, to read: "Residue on evaporation, not more than 0.1 per cent." Method of assay added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 528, and Abstr. Prop. Changes, Part 3, 1914, p. 5.

E'we, G. E.: One lot of iron chloride solution assayed 10.48 per cent metallic iron, 0.4 per cent salts of fixed alkalies, and had a specific gravity of 1.32, which is higher than that required by the U. S. P., namely, 1.29.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 142.

Hill, C. A.: Of 80 samples of solution of ferric chloride examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0.5 to 10.6 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

U. S. P. IX: Rubric for tincture of ferric chloride to read not less than 13 per cent on anhydrous salt corresponding to 4.6 of metallic iron. Specific gravity about 1.000. Modified method of assay.—J. Am. Pharm. Assoc. 1914, v. 3, p. 545, and Abstr. Prop. Changes, Part 3, 1914, p. 22.

Table showing some of the analytical results reported for tincture of ferric chloride.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	4	3	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A	44	26	Proc. Kentucky Pharm. Assoc., 1914, p. 117.
Brown, Lucius P	6	1	Bull. Tennessee F. & D. Dept., 1914, v. 1, No. 3, p. 3.
Frary, Guy G	27	8	Rep. South Dakota F. & D. Com., 1914, p. 225, 266
Ladd, E. F	52	21	Bull. North Dakota Exper. Sta. F. Dept., 1914, v. 3, p. 43–44.
Lythgoe, Hermann C	5	1	Rep. Massachusetts Bd. Health, 1913, 1914, p. 411.
Stallings, R. E	4	2	Month. Bull. Georgia Dept. Agric., 1914, v. 1, p. 18.
Wiedemann, H. E	51	39	Rep. Missouri F. & D. Com., 1914, p. 27–28.

FERRI ET QUININÆ CITRAS.

Rupp, E.: Outline of method for determining the quinine content of iron and quinine citrate.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 314.

Mayer, Joseph L.: The quinine content of four samples of iron and quinine citrate was found to vary from 12.31 to 14.02 per cent; the iron content from 12.96 to 15.02.—Proc. New York Pharm. Assoc. 1914, p. 115.

FERRIC GLYCEROPHOSPHATE.

Umney and Bennett: Ferric glycerophosphate should contain approximately 15 per cent of metallic iron, and should be completely soluble in 2 parts of water.—Pharm. J. 1914, v. 92, p. 135; also Year-Book of Pharmacy, 1914, p. 406.

FERRI HYDROXIDUM.

Cohen, Theodore: A new method for the preparation of colloidal ferric hydroxide.—J. Am. Chem. Soc. 1914, v. 36, p. 19–23.

Rohland, Paul: The absorption of colloidal iron hydroxide.—Ztschr. physik. Chem. 1914, v. 86, p. 633–634.

FERROUS LACTATE.

Rupp, E.: Modified method for the determination of iron in iron lactate.—Südd. Apoth.-Ztg. 1914, v. 54, p. 314; also Apoth.-Ztg. 1914, v. 29, p. 723.

FERRI PYROPHOSPHAS.

E'we, G. E.: The one sample of iron pyrophosphate examined contained 11 per cent of water.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 142.

FERRI SULPHAS.

de Forcrand, R.: Ferrous sulphate and its hydrates.—Compt. rend. Acad. sc. 1914, v. 158, p. 20–23.

Fawsitt and Powell: The action of concentrated sulphuric acid on iron.—J. Soc. Chem. Ind. 1914, v. 33, p. 234–237.

Wirth and Bakke: The examination of the sulphates of iron. Production and properties of the several normal, basic, and acid iron sulphates. Solubility, stability, relation in water and in sulphuric acid.—Ztschr. anorg. Chem. 1914, p. 87, p. 13–46.

Jensen, H. R.: Of 28 samples of iron sulphate, 3 were unduly below the stringent official purity limit of 99.4 per cent.—Evans' An. Notes, 1914, p. 39.

Mann, E. W.: We have several times reported upon the impossibility of the 1898 Ph. Brit. standard, and note that the more reasonable figure of 97.5 per cent is not adopted. The best sample examined during the year showed 97.91 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 45.

Hill, C. A.: Of 30 samples of ferrous sulphate examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0.3 to 2 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

Baker, W. L.: Iron sulphate dried contained 33 per cent of moisture.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

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Storey, Oliver W.: A microscopic study of electrolytic iron, with illustrations.—Tr. Am. Electrochem. Soc. 1914, v. 25, p. 489–528. See also Watts and Li: p. 529–536.

Corfield and Pratt: The determination of iron in the presence of phosphoric acid.—Year-Book of Pharmacy, 1914, p. 393–399.

Helch, Hans: In all iodometric iron determinations, the mixture after the addition of potassium iodide must be protected from light.—Pharm. Post, 1914, v. 47, p. 579.

Editorial: The position of iron in therapeutics. A review.—Prescriber, 1914, v. 8, p. 173–175.

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Day and Ferguson: In the treatment of ankylostoma anemia, the administration of simple forms of iron by the mouth is more satisfactory than the use of organic compounds or hypodermic medication.—Lancet, 1914, v. 187, p. 82–87.

FERRUM REDUCTUM.

Mann, E. W.: The requirements of the Ph. Brit. have been somewhat increased in the new issue, 80 per cent of metallic iron being the minimum percentage allowable.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 45.

Fernau, Albert: The method of assay included in the Ph. Helv. IV is simple and gives correlating and satisfactory results.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 242.

Lefeldt, M.: The Ph. Germ. V method of stating the assay process for reduced iron should be more definite.—Pharm. Ztg. 1914, v. 59, p. 42.

Sudro, W. F.: Of 61 samples of reduced iron examined, the greater majority were unfit to be safely used as reduced iron.—Rep. North Dakota F. Com. 1914, p. 31. See also Ziefle, Adolph: Bull. North Dakota Exper. Sta. 1914, v. 3, p. 124–127.

Stockinger, O.: Of eight samples examined, all assayed above the 90 per cent metallic iron required by U. S. P., ranging from 92 to 95 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 142.

Hill, C. A.: Of 26 samples of reduced iron examined during the years 1910 to 1913, inclusive, the arsenic content varied from 16 to 220 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

FLUIDEXTRACTA.

U. S. P. IX: Proposed changes and requirements for fluid extracts to include an introductory statement and general processes for making fluid extracts.—J. Am. Pharm. Assoc. 1914, v. 3, p. 538–544, and Abstr. Prop. Changes, Part 3, 1914, p. 14–21.

Mittelbach, Wm.: The fluid extracts for the U. S. P. IX are receiving considerable attention. The process of their manufacture is to be simplified and condensed.—Proc. Missouri Pharm. Assoc. 1914, p. 107.

Lieungh, Frode: A new method for the making of fluid extracts.—Norges Apotek. Tidsskr. 1914, v. 22, p. 347–352, 360–362.

Grosh, Daniel M.: Commercial production of fluid extracts with some precautions to be observed in moistening the drug and recovering excess of menstruum.—Nat. Druggist, 1914, v. 44, p. 451–452.

Ramsay, C. F.: The manufacture of fluid extracts. A discussion of precautions to be observed in exhausting different drugs. As the primary object of fluid extracts is concentration, a suitable menstruum should in each case be selected with the object of dissolving and retaining permanently the active constituents of the drug, and in order to do this each drug must be separately and individually studied. Many experiments are necessary to determine which is the most suitable menstruum and the best conditions on a manufacturing basis.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1646–1648.

Maines and Gardner: The percolate from all fluid extracts of alkaloidal drugs should be concentrated *in vacuo* with the possible exception of opium, ipecac, and hydrastis. In the use of ordinary stills there is danger of decomposition of the alkaloids.—Merck's Rep. 1914, v. 23, p. 275.

Anon.: A compilation of criticisms of the Ph. Germ. V fluid extracts.—Pharm. Zentralh. 1914, v. 55, p. 601ff.

Helch, Hans: The Ph. Austr. VIII directions to allow the drug powder to expand for 3 hours does not suffice. Maceration for at least 12 hours and with glycerin containing menstrua, for at least 24 hours, would be preferable.—Pharm. Post. 1914, v. 47, p. 572.

Hamilton, H. C.: A discussion of the menstrua used for making the fluid extracts of digitalis, squill, and convallaria, with some observations on the average potency of samples of resulting preparations.—Am. J. Pharm. 1914, v. 86, p. 56–61.

Hague, George W.: Fluid extracts which are neither in the Pharmacopœia nor in the National Formulary are made with menstrua that differ widely in alcoholic content.—Merck's Rep. 1914, v. 23, p. 33.

Maines and Gardner: Total extractive as a factor in fluid extract manufacture, with a table showing the total extractive of fluid extracts examined.—J. Am. Pharm. Assoc. 1914, v. 3, p. 997–1000; also Nat. Druggist, 1914, v. 44, p. 340.

Rüdiger, Hermann: Discussion of a possible modification of the method of producing fluid extracts; a suggestion for fractional percolation.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 62, p. 155. See also Maines and Gardner: J. Am. Pharm. Assoc. 1914, v. 3, p. 1326.

Caesar & Loretz: The determination of the extract content of fluid extracts.—Jahres-Ber. 1914, p. 69.

Curry, Gordon L.: Except for the question of time and economy, there is no reason why all of the fluid extracts should not be made and assayed in any retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 57. See also Hemm, Francis: Proc. Missouri Pharm. Assoc. 1914, p. 14, and Llewellyn, H. D., p. 142.

Editorial: There is a legitimate use and a serviceable use of fluid extracts for the extemporaneous preparation of small quantities of tinctures of drugs that are unofficial and practically unobtainable.—Am. Druggist, 1914, v. 62, p. 278.

Roth, Richard H.: Fluid extract, tinctures, and liquid preparations generally are best kept in amber-colored bottles away from light.—Bull. Pharm. 1914, v. 28, p. 480; also Southern Pharm. J. 1914, v. 6, p. 483.

Anon.: Fluid extracts should be kept during the entire year at as nearly uniform a temperature as possible. They should be also kept securely corked, but not in glass-stoppered bottles.—N. A. R. D. Notes, 1914, v. 18, p. 481.

Becker, I. A.: The alcoholic preparations of the Pharmacopœia—fluid extracts, tinctures, spirits, etc.—should have the alcohol content of the finished product stated definitely and so adjusted that reasonably close adherence to the process would suffice.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1025.

Pescitelli, Luigi: The use of tinctures and of extracts in therapy. A discussion of the several preparations, and a table showing the comparative content of active substances of tinctures, fluid extracts, and extracts and the relation of these preparations to the drug itself.—Boll. chim.-farm. 1914, v. 53, 335–343.

Gregory, William M.: The best results can not be expected from U. S. P. fluid extracts unless they are made from the green plant.—New York M. J. 1914, v. 99, p. 884.

FLUIDEXTRACTA, N. F.

Amos, W. S.: The proposed N. F. fluid extracts should all be included.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

Mittelbach, Wm.: The number of official fluid extracts remains about the same. It might have been very much reduced and an opening made for 50 per cent tinctures.—Proc. Missouri Pharm. Assoc. 1914, p. 107.

Roth, Richard H.: Fluid extracts, tinctures, and liquid preparations generally are best kept in amber-colored bottles away from light.—Pacific Drug Rev. 1914, v. 26, February, p. 12.

Adonis.—Mercier, L.: On the constituents of *Adonis vernalis.*—Nouv. remèdes, 1914, v. 31, p. 1–5.

Anon.: Under the title "Herba adonidis vernalis," the second supplement to the Ph. Ndl. IV is to include the upgrowing portions of *Adonis vernalis* Linn. gathered at the time of flowering.—Pharm. Weekblad, 1914, v. 51, p. 78–79.

Mercier, L. J.: A contribution to the study of the therapeutic action of *Adonis vernalis.*—Bull. gén. therap. 1914, v. 168, p. 133–136.

Agaricus.—Beringer, George M.: A proposed N. F. monograph for white agaric, or larch agaric. To boiling alcohol it should yield not less than 50 per cent of a resinous extract. Upon incineration it should yield not more than 2 per cent of a white ash, rich in phosphates.—J. Am. Pharm. Assoc. 1914, v. 3, p. 873.

Maines, E. L.: Agaric, white, was found to contain 1.29 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Althææ folia.—J. D. Riedel, A.-G.: Mallow leaves contained from 15.2 to 16.6 per cent of ash, and from 36.5 to 41.2 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 31.

Aletris.—Editorial: The proposed monograph for aletris, N. F., contains a grave error in that it describes part of the structures found in false unicorn root.—Pract. Drug. 1914, v. 32, p. 477.

Rippetoe, J. R.: Three samples of aletris contained from 15.85 to 19.82 per cent of alcohol (49 per cent) extract, and from 11.29 to 17.96 per cent of ash. One sample contained 85.47 per cent of insoluble ash.—Am. J. Pharm. 1914, v. 86, p. 436.

Angelica.—Editorial: Under angelica root, N. F., the European drug only is made official, yet the American drug is largely used and therefore should be included in the definition.—Pract. Drug. 1914, v. 32, p. 478.

J. D. Riedel, A.-G.: Angelica root contained from 7.4 to 12.1 per cent of ash, from 38.4 to 40.9 per cent of extract soluble in water, and from 34.2 to 40.8 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

Apii fructus.—Maines, E. L.: Celery seed was found to contain from 7.26 to 10.22 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Rippetoe, J. R.: Three samples of celery seed were found to contain from 6.32 to 25.65 per cent of alcohol extract and from 12.66 to 22.07 per cent of ash. One of the samples was adulterated with fine sand.—Am. J. Pharm. 1914, v. 86, p. 437.

Asclepias.—Beringer, George F.: A proposed N. F. monograph for asclepias, pleurisy root. The dried root of *Asclepias tuberosa* Linné.—J. Am. Pharm. Assoc. 1914, v. 3, p. 873.

Rippetoe, J. R.: Three samples of asclepias were found to contain from 19.19 to 27.80 per cent of alcohol (49 per cent) extract and from 3.51 to 6.64 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 436.

Editorial: Asclepias is a very efficient diaphoretic and broncho-pulmonic agent and while effectual is perfectly harmless.—Eclectic M. J. 1914, v. 74, p. 209–211.

Editorial: *Asclepias tuberosa*, or pleurisy root, acts nicely upon the respiratory tissues.—Phys. Drug. News, 1914, v. 9, p. 364.

Baptisia.—Beringer, George M.: A proposed N. F. monograph for Baptisia, wild indigo root. The dried root of *Baptisia tinctoria* (Linné) R. Brown.—J. Am. Pharm. Assoc. 1914, v. 3, p. 873.

Lewis, S. Judd: The ash content of a selected specimen of the root of Baptisia was found to be 3.04 per cent calculated on the dry root. The root contained 11.30 per cent of moisture.—Pharm. J. 1914, v. 92. p. 127; also Year-Book of Pharmacy, 1914, p. 364–365.

Amos, W. S.: The proposed fluid extract of Baptisia is a very satisfactory preparation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

Boldo.—Anon.: There seems to be little doubt that boldine, the alkaloid of boldo, is one of the most valuable remedies for all chronic infections of the biliary tract at our command, and it seems unfortunate that physicians generally are not more familiar with its properties and do not resort to it more frequently.—Am. J. Clin. Med. 1914, v. 21, p. 806–807.

Bryonia.—Jensen, Dietrich: Two glucosides have been isolated from bryonia, bryonin, an inert constituent isolated by Mankowsky, and bryonidin, an active glucoside that may have cathartic properties.—Apoth.-Ztg. 1914, v. 29, p. 968.

Fearn, John: No physician can use a good preparation of bryonia without becoming more and more a believer in its therapeutic powers.—Eclectic M. J. 1914, v. 74, p. 15.

Cactus grandiflorus.—Editorial: Cactus grandiflorus, the stem is described as five to eight angled. The botanical origin should be given as *Selenocerus grandiflorus.* Cactus grandiflorus should be used as a synonym.—Pract. Drug. 1914, v. 32, p. 478.

Camillia.—Buschmann, E.: A study of the history of the development of *Thea sinensis* Linné.—Arch. Pharm. 1914, v. 252, p. 412–420.

Anon.: Tea from new sources. The cultivation of tea in British provinces outside of India and Ceylon.—Bull. Imp. Inst. 1914, v. 12, p. 540–545.

Hanausek, T. F.: An illustrated description of a sample of tea from Asia Minor.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 28, p. 259–263.

Schulte im Hofe, A.: The nature of tea, cacao, coffee, and tobacco fermentations.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 27, p. 209–225.

Utz: A review of some of the recent literature relating to tea and the chemical examination of tea.—Pharm. Praxis, 1914, v. 12, p. 478–479.

Lemaire, Paul: The lead foil used for wrapping tea, a possible source of chronic lead poisoning.—Répert. pharm. 1914, v. 26, p. 49–52.

Canella.—Mann, E. W.: Two parcels of canella bark dried and ground yielded 7.26 and 5.20 per cent of ash, respectively.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 10.

Cascarilla.—J. D. Riedel, A.-G.: Cascarilla contained from 6.4 to 15.4 per cent of ash; from 17.1 to 25.3 per cent of extract soluble in water, and from 17.8 to 26.1 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

Roberts, J. G.: An ash yield of 20.27 per cent was obtained from cascarilla siftings. Cascarilla bark usually yields 8 to 10 per cent of ash.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 133.

Castania.—Editorial: Under chestnut leaves, the definition specifies that the leaves be collected in September or October, while still green. When the leaves are dried, it would be impossible to tell whether the leaves were collected in September or August. If collected in August they would not be official.—Pract. Drug. 1914, v. 32, p. 478.

Centaurum.—Lilly, J. K.: The American and European centaury are constantly confused.—Proc. N. W. D. A. 1914, p. 264; also Oil, Paint & Drug. Rep. 1914, v. 86, September 30, p. 35.

J. D. Riedel, A.-G.: Centaurum contained from 4.9 to 6.7 per cent of ash and from 37.6 to 43.8 per cent of extract soluble in water.—Riedels' Berichte, 1914, p. 32.

Coffea.—Brindley, J. H.: The commercial aspect of coffee. Historical review.—Simmon's Spice Mill, 1914, v. 37, p. 337–342, 451–454, 574–578, 685-686, 786-788, 901–904, 1014–1016.

Small, W.: Coffee cultivation in Uganda. A review of the methods employed.—Bull. Imp. Inst. 1914, v. 12, p. 242–250.

Morstatt, H.: The cultivation of coffee and harmful insects in the district of Bukoba.—Pflanzer, 1914, v. 10, p. 133–147.

Bertrand and Weisweiller: The composition of essence of coffee. The presence of pyridine. Bull. soc. chim. France, 1914, v. 15, p. 94–96.

Fendler and Stüber: The determination of caffeine in coffee. A comparison of the several methods that have been proposed. A new and simplified method for roasted coffee.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 28, pp. 9–20; also Südd. Apoth.-Ztg. 1914, v. 54, p. 535–536.

Utz: A review of some of the recent literature relating to coffee and the chemical examination of coffee.—Pharm. Praxis, 1914, v. 12, p. 478-479.

Schulte im Hofe, A.: The nature of tea, cacao, coffee, and tobacco fermentations.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 27, p. 209–225.

Abelin and Perelstein: The volatile constituents of coffee. A contribution on the chemical composition and pharmacological action of the volatile constituents.—Münch. med. Wchnschr. 1914, v. 61, p. 867–868.

Anon.: The chemistry of a cup of coffee and a comparison between coffee and tea. Some observations on the effects of roasting and on the strength of cold water extracts of coffee compared with the strength of boiling water extracts.—Am. J. Pharm. 1914, v. 86, p. 216–222.

Larson, Alf.: Coffee and alcohol. A table showing the importation of coffee from 1861–1913. A second table showing the average consumption of coffee in several European countries. Also tables showing the production of alcoholic beverages.—Svensk. Kem. Tidskr. 1914, v. 26, p. 33–45.

Cornus.—Maines, E. L.: Dogwood was found to contain from 9.99 to 11.47 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Rippetoe, J. R.: Three samples of Jamaica dogwood were found to contain from 9.63 to 16.64 per cent of alcohol (65 per cent) extract and from 8.10 to 13.63 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 438.

Coto.—Lilly, J. K.: Little bark answering to the description of coto bark is obtainable.—Proc. N. W. D. A. 1914, p. 263; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Caesar & Loretz: The qualitative determination of cotoin.—Jahres-Ber. 1914, p. 60.

Damiana.—Rippetoe, J. R.: Two samples of damiana were found to contain 19.25 and 21.41 per cent of alcohol extract, and 18.91 and 8.66 per cent of ash, respectively. One sample contained sand.—Am. J. Pharm. 1914, v. 86, p. 438.

Roberts, J. G.: A physical examination of three samples of damiana leaves showed that all of them contained an excessive amount of stems.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 137.

Delphinium.—Beringer, George M.: A proposed N. F. monograph for delphinium, larkspur seed. The dried seeds of *Delphinium consolida* Linné and *Delphinium ajacis* Linné.—J. Am. Pharm. Assoc. 1914, v. 3, p. 874.

Rippetoe, J. R.: Six samples of larkspur seed were found to contain from 19.52 to 44.75 per cent of alcohol extract, and from 5.19 to 6.67 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

Anon.: For tincture of larkspur the dried drug should be used, and never the whole seed. Pure 95 per cent alcohol, and not a weaker one, should be used for the menstruum.—Drug. Circ. 1914, v. 57, p. 669.

Williams, J. B.: The insecticidal value of fluid extract of larkspur seed. From the results observed, it would appear that it is the oil, and not the alkaloid, to which larkspur seed owes its insecticidal properties.—Merck's Rep. 1914, v. 23, p. 297.

Dioscorea.—Beringer, George M.: A proposed N. F. monograph for dioscorea, wild yam root. The dried rhizome of *Dioscorea villosa* Linné.—J. Am. Pharm. Assoc. 1914, v. 3, p. 874.

Lloyd, John Uri: Characteristics and constituents of dioscorea.—Eclectic M. J. 1914, v. 74, p. 228.

Puckner, W. A.: *Dioscorea villosa* (wild yam) contains a saponin and an acrid, irritant resin. It has never been proved clinically or experimentally that this drug has any action whatever except that its irritant resin might, if taken in sufficient quantity, cause irritation of the stomach and vomiting.—Rep. Council Pharm. Chem. 1914, p. 97.

Bettencourt, M. F.: The use of dioscorea in simple intestinal colic.—Nat. Eclect. M. Assoc. Quart. 1914–15, v. 5, p. 333.

Echinacea.—Heyl and Staley: Analyses of two echinacea roots, with report of experimental observations.—Am. J. Pharm. 1914, v. 86, p. 450–455.

Maines, E. L.: Echinacea root was found to contain from 4.87 to 6.05 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Puckner, W. A.: A report on Echtisia, Ecthol, and Echitone, three widely advertised complex preparations containing echinacea.—Rep. Council Pharm. Chem. 1914, p. 80–85.

Editorial: Echinacea cures catarrhs when given internally.—Phys. Drug News, 1914, v. 9, p. 363.

Fearn, John: No remedy ever introduced into the practice of medicine has gained such use or accomplished so much good in the same period of time as echinacea.—Eclectic M. J. 1914, v. 74, p. 177–181.

Ellingwood, Finley: Echinacea: the vegetable "antitoxin." Its characteristics and peculiar therapeutic effects.—Am. J. Clin. Med. 1914, v. 21, p. 987–993.

Euphorbia pilulifera.—Lilly, J. K.: Euphorbia pilulifera frequently contains an excess of foreign plant parts, such as grass, leaves, pieces of wood, etc.—Proc. N. W. D. A. 1914, p. 264; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 35.

Maines, E. L.: Euphorbia was found to contain from 8.33 to 21.66 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Rippetoe, J. R.: One sample of euphorbium was found to contain 41.93 per cent of alcohol extract and 14.25 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

Gemmæ populi.—Beringer, George M.: A proposed N. F. monograph for gemmæ pouli, balsam poplar buds; balm of Gilead buds. The air-dried winter leaf buds of *Populus nigra* Linné, collected early in the spring. Balsam poplar buds should be kept in a tightly closed container of glass or tin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 874.

Maines, E. L.: Balm of Gilead buds were found to contain from 1.84 to 2.41 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Helonias.—Rippetoe, J. R.: Three samples of helonias dioica were found to contain from 28.07 to 31.36 per cent of alcohol (49 per cent) extract, and from 3.6 to 7.7 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

Ritter, E. N.: Helonias, in medicinal doses, is an excellent remedy in uterine disorders. It is a good gastro-intestinal tonic and a mild diuretic.—Ellingwood's Therap. 1914, v. 8, p. 222.

Editorial: There is no agent in materia medica surer in its action, in the direct line of its indications, than helonias. Also known as false unicorn.—Ellingwood's Therap. 1914, v. 8, p. 393.

Hydrangea.—Beringer, George M.: A proposed monograph for hydrangea, the dried rhizome of *Hydrangea arborescens.*—J. Am. Pharm. Assoc. 1914, v. 3, p. 1597.

Maines, E. L.: Hydrangea root was found to contain from 2.91 to 5.18 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Rippetoe, J. R.: One sample of hydrangea was found to contain 13.63 per cent of alcohol (49 per cent) extract and 8.25 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

Ignatia.—Vanderkleed, C. E.: Reports three assays of ignatia; from 1.32 to 1.83 per cent of total alkaloids; two above and one below standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Roberts, J. G.: A two-bag shipment of ignatia bean contained a satisfactory amount of alkaloid, but was considered of inferior quality on account of the presence of 25 per cent of worm-eaten beans.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 142.

Editorial: Ignatia is a homœopathic remedy for changeable moods; better for women, as nux is for men.—Ellingwood's Therap. 1914, v. 8, p. 196.

Inula.—Beringer, George M.: A proposed monograph for inula, the dried rhizome and roots of *Inula helenium*, with not more than 5 per cent of stem bases.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1598.

Senft, Em.: An illustrated description of the determination of phytomelane in the root of *Inula helenium.*—Pharm. Post, 1914, v. 47, p. 207–209.

Iris.—Beringer, George M.: A proposed monograph for orris, the rhizome of *Iris florentina*, *I. Germanica* and *I. pallida*, freed from the roots, peeled and dried. Ash should not exceed 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1598.

Roure-Bertrand Fils: Orris roots must remain three years in the ground before attaining their normal development.—Sc. & Ind. Bull. April, 1914, p. 53.

Maines, E. L.: Orris root was found to contain 2.69 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Rippetoe, J. R.: One sample of orris root was found to contain 1.58 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 441.

J. D. Riedel. A.-G.: Iris contained from 1.9 to 2.2 per cent of ash and from 21.9 to 23.4 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 33.

Juglans.—Beringer, George M.: A proposed N. F. monograph for juglans, juglans; butternut bark. The dried bark of the root of *Juglans cinerea* Linné.—J. Am. Pharm. Assoc. 1914, v. 3, p. 874.

Juniperus.—Beringer, George M.: A proposed N. F. monograph for juniperus, juniper berries. The carefully dried ripe fruit of *Juniperus communis* Linné. Juniper berries should be kept in air-tight or glass containers. Old or insect-infested fruit should not be used.—J. Am. Pharm. Assoc. 1914, v. 3, p. 874.

Roberts, J. G.: A physical examination of two lots of juniper berries revealed a condition of inferiority due to the presence of low-grade berries.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 143.

Anon.: The chapter on minor botany illustrates and describes *Juniperus communis*.—Chem. & Drug. 1914, v. 84, p. 108.

Maines, E. L.: Juniper berries were found to contain from 3.17 to 3.82 per cent of ash.—J. Am. Pharm. Assoc. 1914, p. 425.

Rippetoe, J. R.: Two samples of juniper berries were found to contain 40.15 and 28.12 per cent of alcohol (49 per cent) extract and 3.25 and 3.27 per cent of ash, respectively.—Am. J. Pharm. 1914, v. 86, p. 439.

J. D. Riedel, A. G.: Juniper berries contained from 3 to 4.1 per cent of ash and from 42.9 to 53.7 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Kava kava.—E'we and Vanderkleed: Precipitation of active principles in fluid extract of kava kava.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 275.

Borsche and Gerhardt: The constituents of kava kava.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 2902; also Apoth.-Ztg. 1914, v. 29, p. 927.

J. D. Riedel, A. G.: The constituents of kava kava and the chemical constitution of yangonin.—Südd. Apoth.-Ztg. 1914, v. 54, p. 221. See also Pharm. Ztg. 1914, v. 59, p. 284–285, and Pharm. Post, 1914, v. 47, p. 219–220.

Kola.—Carles, P.: Report of experiences with the alkaloids of kola nut.—Répert. pharm. 1914, v. 26, p. 241–244.

Neal, P. C.: Of six samples of kola nut examined all were accepted.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

Caesar & Loretz: The valuation of kola, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 90.

Vanderkleed, C. E.: Reports nine assays of dried kola nut, from 1.09 to 1.78 per cent alkaloid.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Patch, E. L.: Kola contained from 1.4 to 2.24 per cent alkaloid.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1288.

Caesar & Loretz: Five samples of kola were found to contain from 1.54 to 2.01 per cent of alkaloid.—Jahres-Ber. 1914, p. 39.

Dufilho, E.: The extraction of kola.—Farm. Españ. 1914, v. 46. p. 823–824.

Glücksmann, C.: Some new identification reactions for fluid extract of cola.—Pharm. Praxis, 1914, v. 12, p. 505–517.

Anon.: The consumption of kola, particularly on the part of athletes and tourists is constantly increasing.—Südd. Apoth.-Ztg. 1914, v. 54, p. 347.

Menyanthes.—Beringer, George M.: A proposed N. F. monograph for Menyanthes, menyanthes leaves; buckbean; marsh trefoil. The dried leaves of *Menyanthes trifoliata* Linné. Ash not more than 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 875.

Passiflora.—Beringer, George M.: A proposed N. F. monograph for Passiflora, passion flower; passion vine. The dried herbage of *Passiflora incarnata* Linné, collected after some of the berries have matured. Ash not over 12 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 877.

Havaland, H. G.: Manufacturers and dealers frequently label Passiflora, "passion flower" or "May pop."—Drug Circ. 1914, v. 58, p. 349.

Maines, E. L.: Passion flower herb was found to contain from 9.12 to 9.22 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Editorial: Passiflora relieves uncomplicated insomnia.—Phys. Drug News, 1914, v. 9, p. 363.

Petroselinum.—Beringer, George M.: A proposed monograph for parsley root, the root of *Petroselinum sativum.* Ash should not exceed 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1599.

Pimpinella.—Beringer, George M.: A proposed monograph for pimpernal root, the dried rhizome and roots of *Pimpinella saxifraga* or *P. magna.*—J. Am. Pharm Assoc. 1914, v. 3, p. 1599.

Tunmann, O.: The structural characteristics of pimpinella and the appearance of pimpinellin under the microscope.—Apoth.-Ztg. 1914, v. 29, p. 728-730.

J. D. Riedel, A.-G.: Pimpinella contained from 5.3 to 6.5 per cent of ash, and from 18.2 to 23.1 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

Pinus alba.—Maines, E. L.: White pine bark was found to contain from 1.09 to 2.04 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

Sambucus.—Beringer, George M.: A proposed N. F. monograph for Sambucus, sambucus; elder flowers. The air-dried flowers of *Sambucus canadensis* Linné or of *Sambucus nigra* Linné, separated from the peduncles and pedicels. Ash white and not more than 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 877.

Henkel, Alice: An illustrated description of *Sambucus canadensis* L.—Phys. Drug News, 1914, v. 9, p. 160; also Spatula, 1914, v. 20, p. 473.

J. D. Riedel, A.-G.: Sambucus contained from 8.8 to 10.7 per cent of ash and from 36.4 to 40.3 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 31.

Senecio.—Beringer, George M.: A proposed N. F. monograph for Senecio, senecio; life root. The dried overground portions of *Senecio aureus* Linné, gathered when flowering.—J. Am. Pharm. Assoc. 1914, v. 3, p. 877.

Trifolium.—Beringer, George M.: A proposed N. F. monograph for Trifolium, trifolium; red clover blossoms. The dried flowering heads of *Trifolium pratense* Linné.—J. Am. Pharm. Assoc. 1914, v. 3, p. 879.

Trillium.—Beringer, George M.: A proposed N. F. monograph for Trillium, beth root. The dried rhizome of *Trillium erectum* Linné and closely allied species of *Trillium.* Ash not more than 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 879.

Verbascum.—Beringer, George M.: A proposed monograph for mullein flowers, the dried corollas with adhering stamens of *Verbascum phlomoides* or of *V. thapsiforme.*—J. Am. Pharm. Assoc. 1914, v. 3, p. 1597.

Holm, Theo.: An illustrated description of the structural characteristics of *Verbascum thapsus* L., a common mullein.—Merck's Rep. 1914, v. 23, p. 4–5. See also Henkel, Alice: Phys. Drug. News, 1914, v. 9, p. 159, and Spatula, 1914, v. 20, p. 472.

Rippetoe, J. R.: One sample of mullein was found to contain 16.10 per cent of alcohol (49 per cent) extract and 15.28 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

J. D. Riedel, A.-G.: Verbascum contained from 4.4 to 6.3 per cent of ash and from 48.7 to 52.1 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 31.

Verbena.—Beringer, George M.: A proposed N. F. monograph for Verbena, verbena; blue vervain. The dried overground portion of *Verbena hastata* Linné collected when flowering.—J. Am. Pharm. Assoc. 1914, v. 3, p. 879.

FLUID GLYCERATES.

Smith, Ernest R.: The fluid glycerates as a class possess many advantages over the fluid extracts, but it is to be determined as yet whether the glycerol water menstruum and chloroform water dissolves any of the undesirable constituents of the drug.—Nat. Druggist, 1914, v. 44, p. 167.

Amos, W. S.: The proposed fluid glycerates should be increased in number. The several formulas, with the single exception of fluid glycerate of cascara, were satisfactory.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

FŒNICULUM.

U. S. P. IX: The dried ripe fruit of cultivated varieties with not more than 2 per cent of harmless foreign matter. Ash not exceeding 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 379, and Abstr. Prop. Changes, Part 2, 1914, p. 21.

Alsberg, C. L.: Fennel should contain not less than 96 per cent of sound fennel seed nor more than 9 per cent of ash.—S. R. A.-Chem. 1914, p. 529; also Drug. Circ. 1914, v. 58, p. 545, and Oil, Paint & Drug Rep. 1914, v. 86, July 27, p. 11.

Plahl, Wilhelm: The detection of extracted fennel seed; considerable reliance may be placed on the odor and taste of the individual seed.—Arch. Chem. Mikors. 1914, v. 7, p. 209–211.

Maines, E. L.: Fennel seed was found to contain from 7.85 to 8.40 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Mann, E. W.: In five samples of the powder, the mineral matter ranged from 6.86 to 10.70 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 14.

J. D. Riedel, A.-G.: Fennel contained from 7 to 9.7 per cent of ash and from 28 to 32.1 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Linke, H.: Powdered fennel is frequently adulterated, and samples are met with that exceed the maximum of 10 per cent of ash. The 10 samples examined were found to vary from 8.5 to 23 per cent of ash.—Seven of them exceeded the pharmacopœial limit.—Apoth.-Ztg. 1914, v. 29, p. 541.

FRANGULA.

U. S. P. IX: Description somewhat elaborated. Ash not exceeding 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 380, and Abstr. Prop. Changes, Part 2, 1914, p. 22.

Gathercoal, E. N.: A criticism of the chemical tests for frangula and rhamnus purshiana as proposed for the new U. S. P.—J. Am. Pharm. Assoc. 1914, v. 3, p. 982–983.

Ewe, G. E.: One sample of buckthorn bark, so labeled, proved to be wild cherry bark.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 131.

Lilly, J. K.: Complete substitution with an unknown bark has been noted on two occasions in samples of buckthorn bark. This same bark was noted several years ago in cascara sagrada.—Proc. N. W. D. A. 1914, p. 263; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Maines, E. L.: Buckthorn bark was found to contain from 5.15 to 5.84 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Rippetoe, J. R.: One sample of frangula was found to contain 24.50 per cent of alcohol (38 per cent) extract and 5.24 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

J. D. Riedel, A.-G.: Frangula contained from 3.7 to 6.5 per cent of ash and from 25.8 to 29.1 per cent of extract soluble in 3 parts alcohol and 7 parts water.—Riedel's Berichte, 1914, p. 31.

GALLA.

U. S. P. IX: Excrescence on the young twigs of *Quercus infectoria* and other allied species of *Quercus*. Description elaborated, including a qualitative test.—J. Am. Pharm. Assoc. 1914, v. 3, p. 380, and Abstr. Prop. Changes, Part 2, 1914, p. 22.

Tunmann, O.: Table showing the imports and exports of galls into and from Hamburg. Also table showing origin of the drug.—Apoth.-Ztg. 1914, v. 29, p. 90–91.

Gehe & Co.: Table showing the production of galls in several countries during the years 1904 to 1911, inclusive.—Handelsbericht, 1914, p. 83.

Anon.: Galls and their tannins. A review of the paper by Feist and Haun.—Chem. & Drug. 1914, v. 84, p. 37.

Roberts, J. G.: Tannic acid determinations made on two samples of nutgalls showed the presence of 40.3 and 52.1 per cent, respectively. Samples containing less than 50 per cent of tannic acid are undesirable and therefore are rejected.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Jensen, H. R.: One sample of galls had tannic acid 56 per cent; moisture, 11.4 per cent.—Evans' An. Notes, 1914, p. 34.

Rippetoe, J. R.: One sample of nutgall was found to contain 72.95 per cent of alcohol extract and 1.90 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 441.

Mann, E. W.: Five batches of powdered galls yielded from 1.07 to 1.63 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 14.

Linke, H.: Five samples of galls varied from 1.64 to 2.28 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 541.

J. D. Riedel, A.-G.: Galls contained from 1.6 to 2.9 per cent of ash and from 72.1 to 78.4 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

GAMBIR.

U. S. P. IX: A dried extract prepared from decoctions of the leaves and twigs of *Ourouparia Gambir*. Ash not exceeding 9 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 381, and Abstr. Prop. Changes, Part 2, 1914, p. 23.

Sommerhoff and Apostolo: A note on Chinese gambir.—Ann. chim. applicata, 1914, v. 2, p. 246–251.

E'we and Vanderkleed: A note on soft gambir. This substance contains an excessive amount of water and the amount used in a formula should be corrected so as to comply with the U. S. P. requirements.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1685. See also Stockinger, R.: Proc. Pennsylvania Pharm. Assoc. 1914, p. 138.

Roberts, J. G.: One lot of gambir, in cube form, contained 74.33 per cent of alcohol soluble matter and yielded 4.52 per cent of ash.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 139.

Rippetoe, J. R.: Fifteen samples of gambir contained from 63.30 to 87.00 per cent of alcohol extract, average 78.6 per cent; aqueous extract, 61.7 to 82.75 per cent, average 77.95 per cent; ash, 3.40 to 8.48 per cent, average, 5.55 per cent.—Am. J. Pharm. 1914, v. 86, p. 444.

Hankey, William T.: Of seven samples of catechu examined, two were rejected. The ash content was found to vary from 3.65 to 5.55 per cent.—Proc. Ohio Pharm. Assoc. 1914, p. 45.

Mann, E. W.: In fixing ash limits for catechu, the 1914 Ph. Brit. introduces an innovation, in that 5 per cent is given as the maximum ash allowable for the entire drug, and as much as 8 per cent for the powder.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 11.

Lefeldt, M.: The Ph. Germ. V should include a requirement for alcohol soluble constituents in tincture of catechu.—Pharm. Ztg. 1914, v. 59, p. 43.

GELATINUM.

U. S. P. IX: Description modified. Ash to read not more than 3 per cent. Tests for heavy metals and arsenic added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1570, and Abstr. Prop. Changes, Part 6, 1914, p. 8.

Alsberg, Carl L.: The results of investigation show the presence in gelatin of such metallic impurities as zinc, copper, arsenic, and lead. The cause of these impurities has been shown to be the action of sulphurous acid on the zinc and copper containers during manufacture.—Am. Food J. 1914, v. 9, p. 22.

Eder and Valenta: The available commercial gelatin is usually contaminated by traces or more of sulphurous acid or sulphates.—Chem. Ind. 1914, v. 37, p. 39. See also Linke, H.: Apoth.-Ztg. 1914, v. 29, p. 683.

Baker, W. L.: Three lots of gelatin were rejected on account of color.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Hankey, William T.: Of 17 samples of gelatin examined, 13 were rejected.—Proc. Ohio Pharm. Assoc. 1914, p. 45.

Lansens, J.: Ovules of tannin with directions for making the gelatin base.—Ann. Pharm. Louvain, 1914, v. 20, p. 1–2.

GELSEMIUM.

U. S. P. IX: Monograph elaborated, including a description of the powder.—J. Am. Pharm. Assoc. 1914, v. 3, p. 381, and Abstr. Prop. Changes, Part 2, 1914, p. 23.

Lloyd, John Uri: Characteristics and constituents of gelsemium.—Eclectic M. J. 1914, v. 74, p. 227.

Maines, E. L.: Gelsemium root was found to contain from 2.24 to 2.59 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Sayre, L. E.: Further study of the alkaloid gelseminine.—J. Am. Pharm. Assoc. 1914, v. 3, p. 314–315. See also Merck's Rep. 1914, v. 23, p. 8–9.

Lloyd, John Uri: Gelseminine, an ether soluble alkaloid of gelsemium can be readily obtained by the use of Lloyd's reagent, a form of hydrous aluminum silicate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 625.

Vanderkleed, C. E.: Reports eight assays of gelsemium, found to vary from 0.342 to 0.658 per cent alkaloids; seven above and one below standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Rippetoe, J. R.: One sample of gelsemium was found to contain 2.05 per cent of alcohol extract and 0.38 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

U. S. P. IX: One gm. of the powdered extract to represent 4 gm. of the drug. Magnesium oxide and dried starch to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 535, and Abstr. Prop. Changes, Part 3, 1914, p. 12.

Thorburn, A. D.: Fluid extract of gelsemium was found to vary from 48 to 55 per cent below standard.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 212.

Chillingsworth, F. P.: Physiological study of gelsemine and gelseminine.—J. Am. Pharm. Assoc. 1914, v. 3, p. 315–321.

Editorial: American gelsemium takes the place of coal tar drugs in nerve pain.—Phys. Drug News, 1914, v. 9, p. 363.

Roehr, C. G.: An alkaloid of gelsemium that can be used safely in the treatment of malaria is needed.—New York M. J. 1914, v. 99, p. 1110.

GENTIANA.

U. S. P. IX: Description elaborated, including powder. Ash not exceeding 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 381, and Abstr. Prop Changes, Part 2, 1914, p. 23.

Bridel, Marc: On the presence of gentiopicrin and gentianose in the fresh root of *Gentiana purpurea* L.—J. pharm. et chim. 1914, v. 10, p. 62–66.

Asahina and Yoda: A chemical examination of the Japanese gentian root (*Gentiana scabra* Bunge var. Buergeri Maximowicz).—J. Pharm. Soc. Japan, 1914, August, p. 911.

Bridel, Marc: On gentiacauline, a new glucoside obtained from *Gentiana acaulis* L.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 1000–1003; also J. pharm. et chim. 1914, v. 10, p. 329–335.

Baker, W. L.: Gentian powder was found to be adulterated with foreign material.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Linke, H.: The pharmacopœia should include an ash content for gentian not exceeding 5 per cent.—Apoth.-Ztg. 1914, v. 29, p. 567.

Rippetoe, J. R.: Four samples of gentian were found to contain from 33.40 to 40.88 per cent of alcohol (49 per cent) extract, and from 34.36 to 38.50 per cent of water extract, and from 3.30 to 3.45 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

Maines, E. L.: Gentian root was found to contain from 2.99 to 4.07 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Hankey, William T.: Five lots of five barrels of powdered gentian varied from 12 to 20 per cent of ash, while good gentian usually ranges about 4 per cent.—Proc. Ohio Pharm. Assoc. 1914, p. 54.

Mann, E. W.: The figures obtained for ash in nine samples of gentian varied from 3.34 to 4.85 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 15.

Jensen, H. R.: One sample of powdered gentian root was decidedly inferior, there being woody fiber present and 7 per cent of ash.—Evans' An. Notes, 1914, p. 34.

J. D. Riedel, A.-G.: Gentian contained from 2.5 to 4.8 per cent of ash, from 38.3 to 49.1 per cent of extract soluble in water, and from 42.3 to 46.9 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

Anselmino, O.: Report on a number of experiments to determine the relative specific gravity and extract content of tincture of gentian made from drug containing varying amounts of moisture.—Arb. Pharm. Inst. Univ. Berl. 1914, p. 29–31.

Doerschik, Albert N.: Acetic tincture of gentian, compound; a true bitter tonic.—Western Druggist, 1914, v. 36, p. 213–214; also Pharm. Era, 1914, v. 47, p. 311.

Carlson, van de Erve, Lewis and Orr: The action of the so-called stomachics or bitters on the hunger mechanism. In therapeutic quantities the bitters including gentian have no effect on the gastric tonus and the gastric hunger contractions or on the parallel sensation of hunger.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 209–218.

GLANDULÆ SUPRARENALES SICCÆ.

U. S. P. IX: To require that the product consist of the suprarenal glands of such animals as are used for food by man, cleaned, dried, freed from fat, and powdered, and yielding not less than 0.4 nor more than 0.6 per cent of epinephrine. Added requirement: Not more than 7 per cent of moisture. Method of assay added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1100, and Abstr. Prop. Changes, Part 5, 1914, p. 1.

Seidell and Fenger: Variation in the epinephrine content of suprarenal glands.—Bull. Hyg. Lab. No. 100, p. 55–66.

Haffner and Nagamachi: Report of experimental studies on the physiological activities of organ extracts.—Biochem. Ztschr. 1914. v. 62, p. 49–57.

Cazzaniga, A.: A note on the hemolytic properties of an aqueous extract of the suprarenal.—Arch. farmacol. sper. 1914, v. 17, p. 529–544.

Weiland, W.: The theory and application of organo-therapy including the use of suprarenal and other organic therapeutic preparations.—Therap. Monatsh. 1914, v. 28, p. 229–240.

Barr, James: On the functions of the thyroid, the suprarenal, and the pitiutary glands.—Practitioner, 1914, v. 92, p. 457–469; also Am. Med. 1914, v. 20, p. 260–268.

Hoskins, R. G.: The practical significance of the adrenals.—J. Am. M. Assoc. 1914, v. 62, p. 1803–1805.

See also under "Epinephrine."

GLANDULÆ THYROIDEÆ SICCÆ.

U. S. P. IX: To require that this product consist of the thyroid glands of such animals as are used as food by man, freed from connective tissue and fat, dried and powdered, and yielding not less than 0.17 nor more than 0.23 per cent of iodine in thyroid combination. Assay for iodine added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1101, and Abstr. Prop. Changes, Part 5, 1914, p. 2.

Anon.: Under the title glandulæ threoideæ Ovis, it is proposed to add to the Ph. Ndl. IV a preparation of the thyroid gland of *Ovis aries* Linn.—Pharm. Weekblad, 1914, v. 51, p. 75–77; also Rev. internat. Pharm. Brux. 1914, v. 2, p. 21, and Pharm. Post, 1914, v. 47, p. 125.

Smith and Broders: The iodine content of the thyroid gland, with especial reference to the pathologic types and a review of some experimental work.—J. Am. M. Assoc. 1914, v. 62, p. 113–117.

Seidell and Fenger: Seasonal variation in the composition of the thyroid gland.—Bull. Hyg. Lab. No. 96, p. 67–82; also Pharm. J. 1914, v. 93, p. 868–872.

Fenger, Frederic: The influence of pregnancy and castration on the iodine and phosphorus metabolism of the thyroid gland.—J. Biol. Chem. 1914, v. 17, p. 23–28.

Kendall, E. C.: The determination of iodine in connection with studies in thyroid activity.—J. Biol. Chem. 1914, v. 19, p. 251–256.

Groll and Keulemans: The iodine content of the thyroid gland of sheep; from 0.34 to 0.54 per cent.—Pharm. Weekblad, 1914, v. 51, p. 267–274. See also Pharm. Weekblad, 1914, v. 51, p. 913–916.

Anon.: The relation between fresh and dessicated thyroid may vary from 1 to 10 to from 1 to 2.5, the latter relation being the more frequent.—Apoth.-Ztg. 1914, v. 29, p. 686.

Quant, Ernest: There is no reason why the ratio 1 to 5 for dried thyroid should not become an arbitrary standard, notwithstanding the fact that several reliable workers have challenged the correctness of this factor.—Pharm. J. 1914, v. 92, p. 421.

Groll, J. T.: Heat materially affects the solubility in water of the iodine containing constituents of thyroid glands.—Pharm. J. 1914, v. 93, p. 371.

Weiland, W.: The theory and application of organo-therapy including the use of thyroid and other organic therapeutic preparations.—Therap. Monatsh. 1914, v. 28, p. 229–240.

Blum and Grützner: Study in the physiology of the thyroid. Iodine retention and iodine combination in the organism.—Ztschr. physiol. Chem. 1914, v. 92, p. 360–382. See also v. 91, p. 392–399, 400–424, 450–464, and Apoth.-Ztg. 1914, v. 29, p. 639.

Haffner and Nagamachi: Report of experimental studies on the physiological activities of organ extracts.—Biochem. Ztschr. 1914, v. 62, p. 49–57.

Barr, James: On the functions of the thyroid, the suprarenal and the pituitary glands.—Practitioner, 1914, v. 92, p. 457–469; also Am. Med. 1914, v. 20, p. 260–268.

Bürgi and Traczewski: On the action of organ extracts on the heart. The action of thyroid with a number of tracings.—Biochem. Ztschr. 1914, v. 66, p. 417–439.

Editorial: Thyroid organotherapy in obesity.—New York M. J. 1914, v. 100, p. 776.

Crawshaw, Charles W.: Thyroid extract in nervous disorders.—Lancet, 1914, v. 186, p. 1572–1573.

For additional comments on thyroid see: Index Med.; J. Am. M. Assoc.; Zentralbl. Biochem. Biophys.; Zentralbl. exper. Med.

GLUCOSE.

U. S. P. IX: Glucose to be the product obtained by the hydrolysis of starch, consisting chiefly of dextrose and dextrines. It should be colorless, odorless, or nearly so, and have a sweet taste. Very soluble in water and sparingly soluble in alcohol. It should be free from starch, sulphur dioxide, and arsenic.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1570, and Abstr. Prop. Changes, Part 6, 1914, p. 8.

Wagner, T. B.: The origin and the history of the production of grape sugar from starch.—J. Ind. & Eng. Chem. 1914, v. 6, p. 71; also Oil, Paint & Drug Rep. 1914, v. 85, February 2, p. 35.

Nussbaum: A review of a contribution by Willstätter and Zechmeister on the conversion of cellulose into glucose.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 248.

Jensen, H. R.: Three commercial samples of glucose contained from 34.8 to 67 per cent of dextrose; from 14.9 to 18 per cent of maltose; and from 0.4 to 35.5 per cent of ash; and from 11.5 to 16 per cent of water.—Evans's An. Notes, 1914, p. 35–36.

Morton, Harold A.: On the absorption of glucose by boneblack.—J. Am. Chem. Soc. 1914, v. 36, p. 1832–1838.

Cohen, J. B.: Fate of the glucose molecule in fermentation.—Chem. World, 1914, v. 3, p. 39–42.

Browne, C. A.: A book review of a volume on the chemistry and Technology of Glucose, by H. Wichelhaus.—J. Ind. & Eng. Chem. 1914, v. 6, p. 358.

Baumel and Cathola: Several formula for hypertonic solutions containing glucose; an abstract.—Med. Rec. 1914, v. 26, p. 488. See also Drug. Circ. 1914, v. 57, p. 678.

Scoville, W. L.: The injection into the veins of 250 to 300 cc. of a 30 per cent solution of glucose is said to sober up an intoxicated person at once.—Bull. Pharm. 1914, v. 28, p. 484.

Editorial: The intravenous injection of hypertonic glucose solution. The results obtained by Enriquez seem promising and further reports will be awaited with interest.—New York M. J. 1914, v. 99, p. 489–490.

Hunter and Hill: On the relative intolerance of the sheep to subcutaneous administration of glucose.—J. Biol. Chem. 1914, v. 17, p. 61–63.

For additional references see Index Med.; Zentralbl. exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

GLYCERINUM.

Anon.: The discovery of glycerin. A review calling attention to the first description of this substance by Scheele.—Canadian Pharm. J. 1914, v. 27, p. 348; also Pharm. Era, 1914, v. 47, p. 102.

Holde, D.: The soap, glycerin, and oil industry in the United States.—J. Ind. & Eng. Chem. 1914, v. 6, p. 45.

Oppenheimer, Max: Experimental observations on the formation of glycerin in alcoholic fermentation.—Ztschr. physiol. Chem. 1914, v. 89, p. 63–77.

Heinemann, A.: Process for the synthetic production of glycerin. English Patent 12,366, May 27, 1913.—J. Soc. Chem. Ind. 1914, v. 33, p. 767.

Anon.: Domestic production of glycerin has never been sufficient to meet the home demand, and during the last 10 years fully 350,000,000 pounds have been imported from foreign countries.—Spatula, 1914, v. 20, p. 600.

Noyes, C. R.: On account of the fact that much the largest part of the glycerin production goes to the making of nitroglycerin, much of the product on the market is not U. S. P. The two common impurities in glycerin are butyric acid and acrolein.—J. Am. Pharm. Assoc. 1914, v. 3, p. 854; also Proc. Minnesota Pharm. Assoc. 1914, p. 191.

Fernau, Albert: The Ph. Austr. VIII specific gravity requirement of 1.25 is seldom attained. A permissible variation of from 1.225 to 1.230 would be more satisfactory.—Ztschr. allgem. österr. Apoth.-Ver. 1914, v. 52, p. 253 .

E'we, G. E.: The specific gravity of the nine samples of glycerin examined ranged between 1.247 and 1.249 (U. S. P. not less than 1.246).—Proc. Pennsylvania Pharm. Assoc. 1914, p. 139.

Tortelli and Ceccherelli: A method for the determination of glycerin in "technical glycerin" and in soap lyes.—Chem.-Ztg. 1914, v. 38, p. 3–5; also A new dichromate method, p. 28–31, 46–48. See also Arch. für Hygiene, 1914, v. 82, p. 514–548.

Firth, Marmaduke: An illustrated description of an apparatus for filtering glycerin.—Pharm. J. 1914, v. 93, p. 485.

Hill, C. A.: Of 402 samples of glycerin examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0 to 4 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

Feil, Joseph: A glycerin substitute was found to be a glucose sugar solution.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1648.

Baker, W. L.: One sample of glycerin contained sulphates and, with another sample, was not up to standard in color.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Richter, Ernst: A sample of glycerin did not comply with the diluted sulphuric-acid test.—Apoth.-Ztg. 1914, v. 29, p. 211.

Mann, E. W.: Of 60 samples of pharmaceutical quality of glycerin tested only 2 failed to answer our requirements for purity. These contained 15 and 20 parts per million, respectively, of arsenic.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 45.

Forman, Leroy: The determination of glycerin in tablets and confections.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1644–1645.

E'we and Vanderkleed: Alcohol determinations in the presence of glycerin.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 275.

Benians, T. H. C.: Glycerin in bromidrosis, with a note on military needs.—Lancet, 1914, v. 187, p. 1301–1302; also Chem. & Drug. 1914, v. 85, p. 789.

For additional references on glycerol see Chem. Abstr.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.; Chem. Zentralbl.

GLYCYRRHIZA.

U. S. P. IX: Includes Russian licorice and Spanish licorice, also known as Italian, Levant, Turkish, or Arabian licorice. Russian and Spanish licorice serve to characterize the two species.—J. Am. Pharm. Assoc. 1914, v. 3, p. 382, and Abstr. Prop. Changes, Part 2, 1914, p. 24.

Xrayser II: The history of licorice. In olden times our supply appears to have come exclusively from the East, although the plant is said to be indigenous to the south of Europe.—Chem. & Drug. 1914, v. 85, p. 251.

Whiting, J. D.: The licorice trade of Syria.—Sci. Am. 1914, v. 110, p. 96; also Spatula, 1914, v. 20, p. 227–228.

Rippetoe, J. R.: Five samples of glycyrrhiza were found to contain from 15.78 to 23.36 per cent of water extract, and from 4.34 to 8.60 per cent of ash, and from 25.8 to 30.4 per cent of alkaline aqueous extract.—Am. J. Pharm. 1914, v. 86, p. 439.

Maines, E. L.: Licorice was found to contain from 2.61 to 6.61 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Mann, E. W.: The ash in four samples of powdered glycyrrhiza was in every case less than the 6 per cent limit of the Ph. Brit., the range observed being from 2.74 to 5.59.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 17.

Jensen, H. R.: Two samples of powdered licorice gave: Moisture, 9.9 and 8.3 per cent; ash, 5.6 and 6.0 per cent.—Evans's An. Notes, 1914, p. 44.

Linke, H.: Four samples of glycyrrhiza were found to contain from 4.16 to 6.28 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 568.

J. D. Riedel, A.-G.: Licorice contained from 4.4 to 6.3 per cent of ash and from 34 to 36.1 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Baker, W. L.: An extract obtained from licorice root had a musty taste.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Anon.: The examination of commercial extract of glycyrrhiza.—Pharm. Zentralh. 1914, v. 55, p. 203.

E'we, G. E.: Powdered extract of licorice contained from 25.6 to 37.8 per cent of starch.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 144.

Amos, W. S.: Fluid glycerate of licorice is probably the best form of licorice in a fluid state. Its uses may be many and its taste is much like that of ammoniated glycyrrhizin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323. See also Smith, Ernest R., p. 324.

Parkes and Major: The composition and analysis of compound licorice powder.—Analyst, 1914, v. 39, p. 160–163.

Gibson, W. Howieson: The deficiency of sulphur in compound licorice powder may be due to an inaccuracy in analysis.—Chem. & Drug. 1914, v. 85, p. 72.

Raubenheimer, Otto: Do not keep compound licorice powder and other compound powders in the cellar, as they absorb moisture and deteriorate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 974.

GOSSYPII CORTEX.

Farwell, O. A.: A histological study of gossypii cortex with illustrations showing the cross section of the root and stem.—Merck's Rep. 1914, v. 23, p. 133–138.

Power and Browning: A chemical examination of cotton root bark. No alkaloid is contained in the bark and no evidence could be obtained of the presence of tannin.—Pharm. J. 1914, v. 93, p. 420–423.

Rippetoe, J. R.: Three samples of cotton root bark were found to contain from 5.30 to 8.05 per cent of alcohol and from 5.20 to 8.10 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 438.

GOSSYPIUM PURIFICATUM.

Farwell, O. A.: A histological study of gossypium, with illustrations showing the structural characteristics, including a longitudinal section of the seed and a cross section of the seed.—Merck's Rep. 1914, v. 23, p. 133–138.

Levine, B. S.: The structure of the cotton fiber.—Science, 1914, v. 40, p. 906.

Herzog, A.: Microscopic studies of cotton, with illustrations.—Chem.-Ztg. 1914, v. 38, p. 1089–1091, 1097–1100.

Ross, Heinz: The production of cotton in the Belgian Kongo.—Tropenpflanzer, 1914, v. 18, p. 341–343.

Anon.: The varieties of cotton grown in Turkestan.—Beihefte zum Tropenpflanzer, 1914, v. 15, p. 61–65.

Linke, H.: A sample of German absorbent cotton was found to yield but 0.02 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 541.

For additional references on cotton see Exper. Sta. Rec.; Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.

GRANATUM.

U. S. P. IX.: The dried bark of the stem and root with not more than 2 per cent of wood and other foreign matter. Ash not exceeding 16 per cent. Granatum should not be kept longer than one year.—J. Am. Pharm. Assoc. 1914, v. 3, p. 383, and Abstr. Prop. Changes, Part 2, 1914, p. 25.

Helch, Hans: A method of assay should be included for pomegranate.—Pharm. Post, 1914, v. 47, p. 571.

Dichgans, H.: A comparative study of the several official assay methods for pomegranate.—Apoth.-Ztg. 1914, v. 29, p. 416, 427.

Caesar & Loretz: The valuation of pomegranate, with a table showing the requirements included in the several pharmacopœias.—Jahres-Ber. 1914, p. 61–63. See also: p. 11–12.

GRINDELIA.

U. S. P. IX: The dried leaves of the flowering tops of *Grindelia camporum*, *Grindelia cuneifolia*, or *Grindelia squarrosa*, with not more than 10 per cent of stems and other foreign matter.—J. Am. Pharm. Assoc. 1914, v. 3, p. 383, and Abstr. Prop. Changes, Part 2, 1914, p. 25.

GUAIACOL.

Anon.: The Ph. Brit. V includes guaiacol. May be prepared synthetically or obtained by fractional distillation of beech-tar creosote.—Chem. & Drug. 1914, v. 85, p. 487.

Mayberry, George M.: The administration of guaiacol in pulmonary tuberculosis.—Brit. M. J. 1914, v. 1, p. 84.

Johnson, R. C.: Taken internally, guaiacol is better borne than creosote and it increases the appetite and promotes digestion. It relieves flatulence and is good in some cases of fermentation.—Ellingwood's Therap, 1914, v. 8, p. 89–90.

Editorial: Thirty drops of guaiacol rubbed two or three times a day into the skin of patients with high temperature will produce a powerful depressing effect on the temperature, so great and so erratic as to render it unsafe.—Ellingwood's Therap. 1914, v. 8, p. 315.

Gortner and Banta: Guaiacol is at most only slightly toxic to amphibian eggs and embryos, at saturation (0.4 per cent).—Biochem. Bull. 1914, v. 3, p. 367.

GUAIACOLIS CARBONAS.

Bernau, Albert: The melting point of a pure product ranges from 88° to 89°.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 253.

GUAIACUM.

U. S. P. IX: Guaiacum should melt at from 80° to 90°. It is readily soluble in alcohol, ether, chloroform, creosote, and in solutions of the alkalies or of hydrated chloral T. S. It is sparingly soluble in carbon disulphide or benzene.—J. Am. Pharm. Assoc. 1914, v. 3, p. 384, and Abstr. Prop. Changes, Part 2, 1914, p. 26.

Baker, W. L.: Four lots of guaiac were rejected. They were low in alcohol soluble content, high in ash content.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Scoville, W. L.: Guaiac resin was 67.5 to 92.8 per cent soluble in alcohol. Four out of 8 lots were about 80 per cent soluble.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Rippetoe, J. R.: Two samples of guaiac were found to contain 76.80 and 70.06 per cent of alcohol and 4 and 4.61 per cent of ash, respectively.—Am. J. Pharm. 1914, v. 86, p. 439.

McCaffrey, J. C.: Of eight samples of guaiac examined, two were below the U. S. P. requirement of 85 per cent alcohol soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 139.

Maines, E. L.: Guaiac gum was found to contain from 3.20 to 4.95 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Jensen, H. R.: Three samples of guaiacum had: Ash, 1.5 to 3.4 per cent; alcohol insoluble matter, 15.7 to 32.3 per cent; acid value, 53.5 to 55.—Evans' An. Notes, 1914, p. 36.

Amos, W. S.: Compound gargle of guaiac may have a local use somewhere, but does not appear to have a sufficient importance to justify its inclusion in the National Formulary.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

GUARANA.

U. S. P. IX: To require that guarana contain not less than 4 per cent of caffeine. Method of assay modified. Qualitative test for caffeine added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 384, 991, and Abstr. Prop. Changes, Part 4, 1914, p. 26, Part 4, p. 8.

Maines, E. L.: Guarana was found to contain from 0.89 to 1.18 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

HAMAMELIDIS CORTEX.

Editorial: In diseases of the veins, whatever their character, the free use of witch-hazel, internally and externally, will produce nothing but good results.—Ellingwood's Therap. 1914, v. 8, p. 349; also Phys. Drug. News, 1914, v. 9, p. 363.

Aqua hamamelidis.—U. S. P. IX: Process omitted. New description added. Tests for metallic impurities, limit of dissolved impurities and formaldehyde, added. Product should not contain methyl alcohol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1565–1566, and Abstr. Prop. Changes, Part 6, 1914, p. 3–4.

Arends, Georg: A satisfactory distilled extract of hamamelidis may be prepared from a mixture of witch-hazel bark and leaf macerated for 24 hours with a mixture of alcohol and water and subsequently distilled.—Apoth.-Ztg. 1914, v. 29, p. 986.

Jackson, Cook and Strickland: Eleven samples of distilled watch-hazel were examined. The alcohol content was found to vary from 7.67 to 16.6 per cent.—Rep. Rhode Island F. & D. Com. 1914, p. 16.

Table showing some of the analytical results reported for distilled extract of witch-hazel.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	6	3	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, Lucius P.	2	2	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
Congdon, Leon A.	4	3	Rep. Kansas Bd. Health, 1914, p. 100.
Lythgoe, Hermann C.	13	0	Rep. Massachusetts Bd. Health, 1913, 1914, p. 410.
Strode, Sylvanus E.	10	5	Rep. Ohio D. & F. Div. 1914, p. 120.
Woods, Chas. D.	37	0	Off. Insp. Maine Agric. Exper. Sta. 1914, No. 61, p. 91.

HAMAMELIDIS FOLIA.

Glücksmann, C.: A review of new identification reactions for fluid extract of hamamelidis.—Pharm. Praxis, 1914, v. 12, p. 425–427.

HEXAMETHYLENAMINA.

Editorial: Hexamina is the Ph. Brit. V title for hexamethylenamine.—Am. Druggist, 1914, v. 62, p. 404. See also Chem. & Drug. 1914, v. 85, p. 487, and Canadian Pharm. J. 1914, v. 48, p. 204.

Anon.: Hexamethylenetetramine is sold under the proprietary names of "Aminoform," "Cystamin," "Metramine," "Urisol," "Uritone," "Xametrin," "Vesalvine," etc.—Pharm. J. 1914, v. 93, p. 346.

Vanino and Schinner: On the combinations of hexamethylenetetramine.—Arch. Pharm. 1914, v. 252, p. 449–459.

Redman, Weith and Brock: The determination of phenol in the presence of hexamethylenetetramine and formaldehyde.—J. Ind. & Eng. Chem. 1914, v. 6, p. 205–206. See also p. 7.

Kebler, L. F.: Outline of method for the determination of hexamethylenamine in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1093.

Stüwe, W.: The determination of formaldehyde, hexamethylenetetramine and formalin pastilles.—Arch. Pharm. 1914, v. 252, p. 430–435. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 638.

Sachs, Otto: On the qualitative differences of the contents of formaldehyde in urotropin and in hexamethylenetetramine.—Therapist, 1914, v. 24, p. 88–90.

Dunning, H. A. B.: Detection and estimation of minute quantities of formaldeyhyde in presence of hexamethylenamine and of methyl alcohol in presence of ethyl alcohol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 637–641.

Gross, S.: The detection of hexamethylenetetramine in urine by the use of acetic acid and solution of corrosive mercuric chlorid.—Pharm. Zentralh. 1914, v. 55, p. 726.

Thomann: A review of the article by Rosenthaler on the detection of hexamethylenetetramine in wine and in milk.—Schweiz, Apoth.—Ztg. 1914, v. 52, p. 7.

Schmiz, Ed.: The simulation of an albumin reaction by hexamethylenetetramine.—Deutsch. med. Wchnschr. 1914, v. 40, p. 128–129; also Pharm. Ztg. 1914, v. 59, p. 187.

Pfau, Herm.: The determination of albumin in urine in the presence of hexamethylenamine.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 162–163.

Russo, C.: a chemico-physical research on urotropin in relation to the constitution of the base.—Gaz. Chim. Ital. 1914, v. 44, p. 16–20. Anon.: Hexamethylenamine (urotropin) and acetyl salicylic acid (aspirin) are chemically incompatible.—J. Am. M. Assoc. 1914, v. 63, p. 1971.

Mannich, C.: Incompatibility of antipyrine and hexamethylenamine.—Merck's Rep. 1914, v. 23, p. 278.

Guyot, R.: Incompatibility of urotropin in mixture with lithium benzoate and other substances.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 60–64.

Puckner, W. A.: A report on hexamethylenamine as a cure-all, with quotations from the literature used in the exploitation of Cystogen.—Rep. Council Pharm. Chem. 1914, p. 66–69.

Hanzlik, Paul J.: The liberation of formaldehyde from hexamethylenamine in pathologic fluids.—J. Am. M. Assoc. 1914, v. 62, p. 295–296. See also J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 518, and Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 1–7.

Levy and Strauss: A clinical and bacteriological study of hexamethylenamine as an urinary antiseptic.—Arch. Int. Med. 1914, v. 14, p. 730–742.

Hinman, Frank: The value of hexamethylenamine as an internal antiseptic in other fluids of the body than urine.—Arch. Int. Med. 1914, v. 13, p. 841–852; also abstract Therap. Gaz. 1914, v. 38, p. 639.

McGuigan and Hess: Hexamethylenamine as an antiseptic to prevent and to combat various infections of the serous cavities and blood as well as those of the urinary tract.—Arch. Int. Med. 1914, v. 13, p. 853–855.

Boruttau, H.: A comparison of the activity of combinations of hexamethylenetetramine.—Ztschr. exper. Path. u. Therap. 1914, v. 16, p. 484–492.

Austin, F. D.: The dose of hexamethylenamine. Based on chemical tests for free formaldehyde in the fluids of the body. It is the duty of every physician to test for free formaldehyde.—New York M. J. 1914, v. 99, p. 633–636.

Copeland, Gordon G.: Administration of urotropin in carbonic acid water.—Brit. M. J. 1914, v. 1, p. 1158.

Sachs, Otto: The application of urotropin in dermatology.—Therapist, 1914, v. 24, p. 55–57, 67–68, 75–76.

Baumen, J.: Hypodermic injections of hexamethylenetetramine in the treamtent of typhoid fever; an abstract.—Med. Rec. 1914, v. 86, p. 362.

Dyer, Isadore: The use of hexamethylenamine and of preparations containing hexamethylenamine in the treatment of pellagra.—Merck's Arch. 1914, v. 16, p. 255.

Raubenheimer, Otto: Hexamethylenamine should be administered with caution. A patient who had taken 5-grain doses every hour until five doses were taken was thrown into great excitement with impairment of vision.—J. Am. Pharm. Assoc. 1914, v. 3, p. 641.

Simon: Six cases in which hematuria followed the administration of fairly large doses of urotropin. In rabbits, hematuria could be produced only by the administration of very large doses—8 gm. per day.—Therap. Monatsh. 1914, v. 28, p. 544.

Manthner, Julius: The use of urotropin as a preservative for caviar.—Österr. Sanitatswesen, 1914, v. 26, p. 89–94.

For additional references on hexamethylenamine see Index Med.; J. Am. M. Assoc.; Chem. Abstr.; J. Chem. Soc. Lond.

HOMATROPINÆ HYDROBROMIDUM.

Jensen, H. R.: The sample of homatropine hydrobromide tested, melted at 208° to 211°.—Evans' An. Notes, 1914, p. 37.

HUMULUS.

U. S. P. IX: May include not more than 2 per cent of stems, leaves, and other foreign matter. To be dried at not exceeding 70°. Hops should be kept in air-tight containers. Ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 384, and Abstr. Prop. Changes, Part 2, 1914, p. 26.

Anon.: Mustard, figs, hops, and prunes are commercial products that need no pharmacopœial definition.—Lancet, 1914, v. 187, p. 907.

Anon.: The growth and cultivation of hops. A review of two recently published reports by J. Schmidt.—Nature, 1914, v. 93, p. 199–200.

Gehe & Co.: Table showing the amount of hops produced in Germany during the years 1909 to 1913, inclusive. Also table giving the amount in other countries for the years 1911 to 1913, inclusive.—Handeslbericht, 1914, p. 73–74.

Baker, W. L.: Hops were rejected, as they were inferior in both color and odor.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Hanausek, T. F.: The definition of hops and of lupulin.—Arch. Chem. u. Micros. 1914, v. 7, p. 44–47.

Rabak, Frank A.: Aroma of hops. A study of the volatile oil with relation to the geographical sources of hops.—J. Agric. Research, 1914, v. 2, p. 115–159; also J. Am. Pharm. Assoc. 1914, v. 3, p. 779–785.

Chapman, A. C.: The nitrogenous constituents of hops.—J. Chem. Soc. Lond. 1914, v. 105, p. 1895–1907; also Proc. Chem. Soc. 1914, v. 30, p. 196–197, and Pharm. J. 1914, v. 92, p. 878.

Editorial: Hops and their constituents. A review of an article by Power.—Pharm. J. 1914, v. 92, p. 871. See also review of article by Adler, L.: Exper. Sta. Rec. 1914, v. 30, p. 209.

Rippetoe, J. R.: Three samples of hops were found to contain from 29.40 to 34.53 per cent of alcohol (49 per cent) extract and from 8.08 to 13.01 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 439.

Carlson, van de Erve, Lewis and Orr: The action of the so-called stomachics or bitters on the hunger mechanism. In therapeutic quantities the bitters, including humulus, have no effect on the gastric tonus and the gastric hunger contractions or on the parallel sensation of hunger.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 209–218.

HYDRARGYRI CHLORIDUM CORROSIVUM.

E'we, G. E.: Of two lots of mercuric chloride examined, one was strictly U. S. P. and assayed 99.9 per cent $HgCl_2$. The other lot contained 1.2 per cent of foreign salts.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 146.

Kaufler and Klages: Apparatus for manufacturing mercury bichloride. U. S. Patent 1,082,530, December 30, 1913.—J. Soc. Chem. Ind. 1914, v. 33, p. 137.

Stüwe, W.: The volumetric determination of mercuric chloride.—Chem.-Ztg. 1914, v. 38, p. 320.

Editorial: The names that suggest mercuric chloride tablets to be harmless preparations should be discontinued, if necessary, by law.—Southern Pharm. J. 1914, v. 6, p. 287. See also Neptune, C. A.: Proc. West Virginia Pharm Assoc. 1914, p. 53.

Raubenheimer, Otto: Bichloride tablets of the German Pharmacopœia. A description of the product and reproduction of the official requirements.—J. Am. Pharm. Assoc. 1914, v. 3, p. 186–188.

Beringer, George M.: Bichloride of mercury tablets and bichloride tablet legislation. A review of the requirements included in foreign pharmacopœias.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1111–1117; also Am. J. Pharm. 1914, v. 86, p. 313–322, and Proc. New Jersey Pharm. Assoc. 1914, p. 56–64.

Remington, J. P.: In the U. S. P. IX, it is proposed to specify the size and quantites of bichloride and sodium or amonium chloride.

There is a proposition to use coffin-shaped tablets.—Proc. West Virginia Pharm. Assoc. 1914, p. 89. See also J. Am. Pharm. Assoc. 1914, v. 3, p. 430.

Dohme, A. R. L.: The proposition to have the committee of revision undertake to lay down any one particular shape, color, or form of wrapper would be a dangerous precedent to establish.—Oil, Paint & Drug Rep. 1914, v. 85, Feb. 16, p. 32K.

The resolutions adopted by the American Medical Association regarding the form and size of tablets of mercuric chloride is reprinted.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1123; also J. Am. M. Assoc. 1914, v. 63, p. 108; Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 13.

Editorial: The solution of the bichloride problem. A suggestion to add tartar emetic to tablets of mercuric chloride.—New York M. J. 1914, v. 99, p. 1094.

Vanderkleed and E'we: Experiments indicate that to be effective an emetic must act much more promptly than tartar emetic does, as the absorption of bichloride takes place very rapidly.—Drug. Circ. 1914, v. 58, p. 465; also Proc. Pennsylvania Pharm. Assoc. 1914, p. 278.

Beal, J. H.: Proposed bichloride legislation. A review of some of the curious features proposed for enactment into law.—J. Am. Pharm. Assoc. 1914, v. 3, p. 161–164. See also p. 482–483.

Wilbert, M. I.: A discussion of the need for restricting the sale and distribution of bichloride of mercury tablets.—Am. J. Pharm. 1914, v. 86, p. 121–128.

Lackey, Richard H.: The enormous sale of bichloride tablets demands some effective legal method to make it as difficult as possible to obtain these dangerous tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 607. See also Craig, Hugh, p. 754; Bodemann, Wilhelm: N. A. R. D. Notes, 1914, v. 18, p. 118, and Drug. Circ. 1914, v. 58, p. 452.

Hancock, James E.: A review of the law regulating the sale of tablets of mercury bichloride in Maryland.—Proc. Maryland Pharm. Assoc. 1914, p. 116; also Oil, Paint & Drug Rep. 1914, v. 85, June 8, p. 11.

West, Charles A.: A review of the requirements embodied in the several bills for restricting the sale of mercury tablets.—Proc. N. W. D. A. 1914, p. 137–141.

Kebler, L. F.: Outline of method for the determination of mercuric chloride in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1087, 1091–1092.

Chapin, Robert M.: The assay of mercuric chloride tablets, a review of available methods.—Am. J. Pharm. 1914, v. 86, p. 1–6; also Merck's Rep. 1914, v. 23, p. 244–245.

Stüwe, W.: The determination of mercury in corrosive sublimate pastilles according to the Ph. Germ. V.—Pharm. Ztg. 1914, v. 59, p. 215. See also Rupp, E.: Südd. Apoth.-Ztg. 1914, v. 54, p. 322.

Jönson, A.: The available pastilles of corrosive mercuric chloride did not always contain the amount of sublimate claimed for them.—Apoth.-Ztg. 1914, v. 29, p. 39.

Moll, F.: The danger of poisoning by the vapors of corrosive sublimate.—Ztschr. ang. Chem. 1914, v. 27, p. 559–560.

Beekman, Fenwick: A nonfatal case of mercuric chloride poisoning due to vaginal douches.—J. Am. M. Assoc. 1914, v. 62, p. 535.

Morlot and Zuber: Two cases of acute mercurial intoxication, which demonstrate and confirm the idea that the noxious effects are due to the very great causticity of mercury.—Compt. rend. Soc. Biol. 1914, v. 76, p. 896–898.

Niece, Frederic E.: The records up to date show that out of 756 known cases over 56 per cent have proven fatal, while something less than 44 per cent have recovered.—Pract. Drug. 1914, v. 32, p. 55–57.

Durrah and White: Recovery from bichloride of mercury poisoning. Report of a case.—Med. Rec. 1914, v. 86, p. 844.

Carter, Thomas A.: Mercuric chloride poisoning. A report of several cases in which a new antidote was used. The antidote used was sodium phosphite, followed by sodium acetate as a diuretic and solvent.—Am. J. Clin. Med. 1914, v. 21, p. 314–317; also Drug. Circ. 1914, v. 58, p. 284, 345.

Anon.: Questionable treatment of mercuric chloride poisoning. Comment on the use of sodium bicarbonate in the treatment of mercuric chloride poisoning.—Rep. Chem. Lab. Am. M. Assoc. 1914, v. 7, p. 39–41.

Hall, William A.: Corrosive sublimate antidote. A suggestion to utilize the principles of Mayer's reagent.—Pharm. Era, 1914, v. 47, p. 455–456; also Midl. Drug. 1914, v. 48, p. 467–470.

Lespinasse, Albert: The incompatibility between tincture of iodine and Van Swieten's solution of mercuric chloride.—Bull. sc. pharmacol. 1914, v. 21, p. 463–464.

Strickler, Margaret: Bichloride of mercury in combination with tincture of nux vomica and tincture of cinchona or tincture of cinchona compound will result in a precipitation in which much, if not all, of the mercuric chloride as such is lost.—Proc. Virginia Pharm. Assoc. 1913, 1914, p. 124–125; also Southern Pharm. J. 1914, v. 7, p. 11.

Hamilton, Herbert C.: Mercuric chloride, while highly efficient under exceptional conditions, is so readily destroyed or so lowered in efficiency under ordinary conditions that it is not a dependable disinfectant.—Therap. Gaz. 1914, v. 38, p. 313.

Scoville, W. L.: Comparative experiments with mercuric iodide, chloride, cyanide, and benzoate indicate that the iodide is much the most powerful bactericide and is about 10 times as powerful as the chloride.—Bull. Pharm. 1914, v. 28, p. 526.

Whiting, A. D.: Alcoholic solutions of mercuric chloride are much more efficient than aqueous and markedly so when used on a dry skin.—J. Am. M. Assoc. 1914, v. 63, p. 475, also Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 141.

For additional references see J. Am. M. Assoc.; Oil Paint & Drug Rep.; N. A. R. D. Notes; Chem. Abstr.; and Chem. Zentralbl.

HYDRARGYRI CHLORIDUM MITE.

Fernau, Albert: Commercial samples of mercurous chloride usually contain traces of chlorides, soluble in alcohol, and produce opalescence with silver nitrate.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Sudro, W. F.: Of 103 samples of calomel examined, only 1 sample was questionable.—Rep. North Dakota Exper. Sta. 1912, 1913, p. 165–168.

Marden and Cushman: A study of some of the methods for the determination of calomel in calomel tablets.—Am. J. Pharm. 1914, v. 86, p. 511–516. See also Kebler, L. F.: J. Am. Pharm. Assoc. 1914, v. 3, p. 1089.

Brown, L. A.: Fifteen samples of calomel and soda tablets analyzed: 11 passed and 4 classed as adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Windolph, J. Fred.: Calomel and sodium bicarbonate tablets change chemically and give visible evidence of the change.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 222.

Nitardy, F. W.: Calomel suspension. The use of acacia as a suspension medium.—J. Am. Pharm. Assoc. 1914, v. 3, p. 965–966.

Kollo, Konstantin: Ampoules of calomel in liquid paraffin may be sterilized for 15 minutes at 105°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Patein, G.: Experimental study on the action of hydrochloric acid and of alkaline chlorides on calomel in glass and in the digestive tract.—J. pharm. et chim. 1914, v. 9, p. 49–61, 109–114; also Pharm. J. 1914, v. 92, p. 363.

Crouzel, Ed.: The several toxic effects of calomel.—Répert. pharm. 1914, v. 26, p. 151–153.

Schamberg and Kolmer: Calomel has a germicidal activity equal to that of mercuric chloride.—J. Am. M. Assoc. 1914, v. 62, p. 1950.

Marrs, W. T.: Mercury in some form is the best baby medicine we possess.—Phys. Drug News, 1914, v. 9, p. 116.

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Hemm, Francis: Mercuric iodide is usually mentioned in Schedule A of poison schedules, but has not been used for years as a poison.—Proc. Missouri Pharm. Assoc. 1914, p. 49.

Beckman, Ernst: On the cryoscopic constants of mercuric iodide.—Ztschr. Anorg. Chem. 1914, v. 89, p. 167–170.

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Bender, A. W.: The determination of mercuric iodide in tablets.—J. Ind. & Eng. Chem. 1914, v. 6, p. 753–754; also Chem. News, 1914, v. 110, p. 94.

E'we, G. E.: One lot of commercial ampoules of olive oil solution of red mercuric iodide contained crystals of the salt.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Stassano and Gompel: Relative bactericidal power of mercuric chloride and mercuric iodide.—Compt. rend. Soc. Biol. 1914, v. 77, p. 9–11; also Pharm. J. 1914, v. 93, p. 147, 349.

Scoville, W. L.: Comparative experiments with mercuric iodide, chloride cyanide, and benzoate indicate that the iodide is much the most powerful bactericide.—Bull. Pharm. 1914, v. 28, p. 526.

Whiting, A. D.: Watery solution of biniodide of mercury, especially when combined with potassium iodide, are much more efficient than the same strength solutions of mercuric chloride.—J. Am. M. Assoc. 1914, v. 63, p. 475; also Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 141.

HYDRARGYRI OXIDUM FLAVUM.

Roberts, J. G.: Sample of yellow mercuric oxide answered all the U. S. P. requirement with the exception that it yielded 0.7 per cent of residue upon ignition.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 146.

Moser and Schmid: The determination of carbon monoxide by yellow mercuric oxide.—Ztschr. anal. Chem. 1914, v. 53, p. 217–233.

Curry, Gordon L.: The U. S. P. should include a formula for an ointment of yellow mercuric oxide made from a recently precipitated and still-moist yellow oxide for ophthalmic practice.—Proc. Kentucky Pharm. Assoc. 1914, p. 59.

HYDRARGYRUM SALICYLATE.

Rupp, E.: Commercial mercuric salicylic acid is a variable compound and requires further study. A modified method for the quantitative determination of mercury is outlined.—Südd. Apoth.-Ztg. 1914, v. 54, p. 314; also Apoth.-Ztg. 1914, v. 29, p. 723.

De Coninck, W. Oechsner: On several reactions for mercuric salicylate.—Rev. gén. chim. 1914, v. 17, p. 125–126.

Kollo, Konstantin: Ampoules of mercuric salicylate with liquid paraffin may be sterilized for 15 minutes at 100°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

HYDRARGYRUM.

Editorial: A review of the present economic conditions in the market for mercury.—Chem. & Drug. 1914, v. 85, p. 92. See also Pharm. J. 1914, v. 93, p. 550.

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Anon.: The normal freezing point of mercury has been determined by Henning at −38.89°.—Nature, 1914, v. 93, p. 16.

Grymble, C. R.: The absorption spectra of some mercury compounds.—J. Chem. Soc. Lond. 1914, v. 105, p. 658–669.

E'we, G. E.: Of two lots of mercury examined, one was strictly U. S. P., while the other contained traces of foreign metals.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 146.

LaWall, Charles H.: A volumetric method for the estimation of mercury in some of its compounds and preparations.—J. Am. Pharm. Assoc. 1914, v. 3, p. 50.

Beckers, Wilhelm: The determination of mercury in mercurial ointment.—Pharm. Ztg. 1914, v. 59, p. 422. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 145–146, and comment by Jaenicke: Pharm. Ztg. 1914, v. 59, p. 450.

E'we, G. E.: All three lots of powdered mercury mass were slightly below the standard of 33 per cent metallic mercury, testing 31.8 to 32.3 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 146.

Xrayser II: Grey powder has from time immemorial been the familiar name of hydrargyrum cum creta, and is the British Pharmacopœia synonym.—Chem. & Drug. 1914, v. 84, p. 455.

Cohn, George: The chemistry and physiology of mercurials.—Pharm. Zentralh. 1914, v. 55, p. 91–102, 121–131, 146–153, 169–180, 217–228.

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Klotz, A.: The quantitative determination of mercury in urine.—Ztschr. physiol. Chem. 1914, v. 92, p. 286–291.

Brandt, L.: Observations on the quantitative separation of mercury and arsenic.—Chem.-Ztg. 1914, v. 38, p. 474.

Schulte, H.: On the danger of mercurial poisoning from the handling of mercury amalgam by dentists.—Arch. Hyg. 1914, v. 83, p. 43–73.

Grumme-Forhde: On the danger of the internal administration of iodine in connection with the use of mercury in the eye.—Arch. exper. Path. u. Pharmakol. 1914, v. 77, p. 448–457.

Bunch, J. L.: Some continental methods of treating syphilis. The methods of administering mercury.—Practitioner, 1914, v. 92, p. 255–260.

Mason, F. S.: The action of mercury in syphilis.—Prescriber, 1914, v. 8, p. 77–79.

Scholtz, W.: On the treatment of syphilis by means of the combined salvarsan-mercury treatment.—Deutsch. Med. Wchnschr. 1914, v. 40, p. 845–856. See also V. Zeissl: Berl. klin. Wchnschr. 1914, v. 51, p. 495–496.

Servoss, Geo. L.: Hypodermic mercurials. A list of the salts employed.—Merck's Arch. 1914, v. 16, p. 346.

Kingsbury and Bechet: The intravenous administration of mercury in syphilis.—J. Am. M. Assoc. 1914, v. 63, p. 563–564.

Raffo and Rossi: Colloidal, organic, combinations of mercury.—Kolloid Ztschr. 1914, v. 14, p. 131–136.

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E'we, G. E.: One sample of ammoniated mercury examined assayed 80.7 per cent mercury, contained 0.4 per cent foreign salts.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 146.

Fernau, Albert: Commercial samples of ammoniated mercury shaken with water invariably give a slight precipitate with silver nitrate. This test is too stringent.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 253.

Harridas and Chondbury: The constitution of "unmeltable" white precipitate.—Ztschr. anorg. Chem. 1914, v. 86, p. 225–229.

Rupp, E.: Outline of method for determining the mercury content of white precipitate.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 314.

HYDRASTININÆ HYDROCHLORIDUM.

Newton, P. A.: Manufacture of hydrastinine. English Patent 14,120, June 18, 1913.—J. Soc. Chem. Ind. 1914, v. 33, p. 503. See also Decker, H., p. 220.

Röher: Synthetic hydrastinine in the treatment of pulmonary hemorrhage.—Therap. Monatsh. 1914, v. 28, p. 505–506.

HYDRASTIS.

U. S. P. IX: The drug may not include more than 10 per cent of stems, leaves, and other foreign matter. To change "hydrastine" to "ether soluble alkaloids of hydrastis." Method of assay slightly modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 384, 992, and Abstr. Prop. Changes, Part 2, 1914, p. 26, Part 4, p. 9.

Stanaland, H. G.: Manufacturers and dealers frequently label hydrastis "golden seal" or "yellow root."—Drug. Circ. 1914, v. 58, p. 349.

Editorial: It is estimated that between 200,000 and 300,000 pounds of golden seal (hydrastis canadensis) are consumed annually, about one-tenth of which is exported.—Am. Druggist, 1914, v. 62, p. 405.

Welch, John T.: The growing of golden seal, or hydrastis. Observations on the care of the seed and the care of the root to be transplanted.—Pacific Pharm. 1914–15, v. 9, p. 201. See also Am. J. Pharm. 1914, v. 86, p. 525–527.

Koch, Felix J.: An illustrated description of the largest hydrastis farm in the world at Camden, Ohio.—Pharm. Post, 1914, v. 47, p. 61–62.

Anon.: The cultivation of hydrastis canadensis in Russia.—Pharm. Weekblad, 1914, v. 51, p. 55–56.

Gehe & Co.: The continued scarcity of hydrastis would indicate that the cultivation of this drug in the United States is not as extensive as might be expected.—Handelsbericht, 1914, p. 114.

Lilly, J. K.: Hydrastis continued to be adulterated to about the same extent as in previous years.—Proc. N. W. D. A. 1914, p. 263; also Oil, Paint & Drug Rep. 1914, v. 86, p. 35.

Neal, P. C.: Of 27 samples of golden seal examined, all were accepted.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

Mayrhofer, Adolf: The microchemical detection of hydrastine and of berberine in the drug.—Pharm. Post, 1914, v. 47, p. 547–551.

Maines, E. L.: Golden-seal root was found to contain from 9.93 to 14.33 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Hydrastis contained from 4.7 to 10.5 per cent of ash and from 22.9 to 27.8 per cent of extract soluble in diluted (70 per cent) extract.—Riedel's Berichte, 1914, p. 33.

Stockinger, O.: One drug sample offered as hydrastis contained berberine but no hydrastine. It appeared to be an entirely spurious sample.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 141.

Roberts, J. G.: Every lot of hydrastis examined was normal in appearance and contained more alkaloids than required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 141.

Diehgans, H.: A comparative study of the several official assay processes for hydrastis and its preparations.—Apoth.-Ztg. 1914, v. 29, p. 498, 516. See also Caesar & Loretz: Jahres-Ber. 1914, p. 23.

Caesar & Loretz: The valuation of hydrastis, with table showing the requirements included in the several pharmacopœias for this drug.—Jahres-Ber. 1914, p. 97–98.

Table showing reported variation in alkaloidal content of hydrastis.

Reporters.	Number of samples.	Alkaloidal principles.		References.
		Minimum.	Maximum.	
Caesar & Loretz	10	2.25	4.21	Jahres-Ber. 1914, p. 39.
Jensen, H. R.	15	2.60	3.60	Evans' An. Notes, 1914, p. 37.
Linke, H.	3	2.57	3.03	Apoth.-Ztg. 1914, v. 29, p. 637–639.
Mann, E. W.	9	1.96	3.44	Ann. Rep. Southall Bros. & Barclay, 1914, p. 15.
Vanderkleed, C. E.	2	3.22	3.42	Proc. Pennsylvania Pharm. Assoc., 1914, p. 160.

Mann, E. W.: The compilers of the Ph. Brit. V have adopted the U. S. P. standards for liquid extract of hydrastis and have also increased the alcoholic strength of the preparations.—Am. Rep. Southall Bros. & Barclay, 1914, p. 52.

Georgević, Konstantin: The determination of hydrastine in fluid extract of hydrastis.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 95–97.

Anon.: The second supplement to the Ph. Ndl. IV requires that fluid extract of hydrastis contain 2 per cent of hydrastine.—Pharm. Post, 1914, v. 47, p. 126. See also Pharm. Weekblad, 1914, v. 51, p. 84.

U. S. P. IX: To require that 100 cc. of the fluid extract of hydrastis yield not less than 1.8 nor more than 2.2 gm. of the ether-soluble alkaloids of hydrastis.—J. Am. Pharm. Assoc. 1914, v. 3, p. 992, and Abstr. Prop. Changes, Part 4, 1914, p. 9.

Helch, Hans: Identity reactions for the constituents of hydrastis would be desirable in connection with fluid extract of hydrastis.—Pharm Post, 1914, v. 47, p. 573.

Gehe & Co.: The alkaloid content of fluid extract of hydrastis gradually decreases on keeping, due to the formation of crystals which inclose hydrastine.—Pharm. Zentralh. 1914, v. 55, p. 399.

van Itallie, E. I.: Fluid extract of hydrastis; its composition and assay. Eighteen samples were found to contain from 1.59 to 3.35 per cent of hydrastine.—Pharm. Weekblad, 1914, v. 51, p. 1522-1530.

Brown, Lucius P.: One sample of tincture of hydrastis examined was found to be illegal.—Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.

U. S. P. IX: One gm. of the powdered extract to represent 4 gm. of the drug. Magnesium oxide and dried starch to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 536, and Abstr. Prop. Changes, Part 3, 1914, p. 13.

Biggar, H. F.: Golden seal is a great Indian remedy for some of the ailments of the mucous membrane as well as the disorders of the digestive tract and valuable as a general tonic.—J. Am. Inst. Homœop. 1914, v. 6, p. 794–795.

HYOSCINÆ HYDROBROMIDUM.

DuMex, A. G.: On the origin and usage of the terms "hyoscine" and "scopolamine." A criticism of the U. S. P.—Am. J. Pharm. 1914, v. 86, p. 339–349.

Editorial: The rational treatment of morphine habituation. An abstract on the administration of hyoscine.—Therap. Gaz. 1914, v. 38, p. 187–189.

HYOSCYAMINÆ HYDROBROMIDUM.

Editorial: Possibly the difficulty of preparing hyoscyamine cheaply, without the presence of hyoscine as an impurity, accounts for its decline in favor.—Lancet, 1914, v. 186, p. 49.

HYOSCYAMUS.

U. S. P. IX: The dried leaves and flowering or fruiting tops. Description elaborated and includes directions for the detection of other species of hyoscyamus. Ash not exceeding 30 per cent.— J. Am. Pharm. Assoc. 1914, v. 3, p. 385, and Abstr. Prop. Changes, Part 2, 1914, p. 27.

Anon.: An illustrated description of an unusually large plant of *Hyoscyamus niger*.—Chem. & Drug. 1914, v. 84, p. 4.

Miller, F. A.: Observations on the breeding of henbane plants to increase the alkaloids.—Lilly Sci. Bull. Ser. 1, p. 130.

Newcomb, Edwin L.: Belladonna and hyoscyamus. A report on cultivation experiments, with a number of illustrations.—Am. J. Pharm. 1914, v. 86, p. 531–542.

Kremers, Edward: The Colorado beetle or common potato bug has been observed on hyoscyamus. The poisonous alkaloids do not necessarily render plants beetle-proof.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1440.

Hooper, David: Henbane is a native of the temperate Himalayas from 8,000 to 11,000 feet. It was for a long time successfully cultivated at Hewra, Deccan, and at Dapuri, near Poona.—Montreal Pharm. J. 1914, v. 25, p. 4.

Lilly, J. K.: Henbane continues to be generally poor in appearance and low in alkaloids. Proc. N. W. D. A. 1914, p. 263; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Sayre, L. E.: *Hyoscyamus muticus*, which is sometimes added to hyoscyamus, may be distinguished almost at a glance by the presence of characteristic branching hairs.—Proc. Kansas Pharm. Assoc. 1914, p. 22.

Neal, P. C.: Of 20 samples of henbane examined, 16 were accepted and 4 were rejected.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

Anselmino, O.: Observations on the alkaloid content of hyoscyamus leaves and the relation of the alkaloid content to ash content and moisture content.—Arb. pharm. Inst. Univ. Berl. 1914, p. 35–36.

Maines, E. L.: Henbane leaves were found to contain from 20.45 to 35.32 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Hyoscyamus contained from 18.1 to 23.8 per cent of ash and from 23.4 to 31.7 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

Dichgans, H.: A comparative study of the several official assay processes for hyoscyamus and its preparations.—Apoth.-Ztg. 1914, v. 29, p. 464–487.

Caesar & Loretz: The valuation of hyoscyamus, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 85.

Fernau, Albert: A minimum content of alkaloid for hyoscyamus should be included in the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 253.

Baker, W. L.: Henbane assayed 0.15 per cent mydriatic alkaloids, which was suspiciously high.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Rusby, H. H.: A henbane that contained 0.039 per cent of alkaloid was probably a sophistication and may have consisted of stramonium.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1290.

Anselmino and Gilg: A study of commercial hyoscyamus leaves. Of the samples examined not one complied with the requirements of the Ph. Germ. V.—Arb. Pharm. Inst. Univ. Berl. 1914, p. 39–46.

Table showing reported variation in alkaloidal content of hyoscyamus.

Reporters.	Number of samples.	Alkaloidal principles.		References.
		Minimum.	Maximum.	
Caesar & Loretz	6	0.004	0.089	Jahres-Ber. 1914, p. 38.
Mann, E. W	1	.036	....	Ann. Rep. Southall Bros. & Barclay, 1914, p. 15.
Roberts, J. G	6	.048	.064	Proc. Pennsylvania Pharm. Assoc. 1914, p. 141.
Scoville, W. L	22	−.050	+.100	J. Am. Pharm. Assoc., 1914, v. 3, p. 1288.
Vanderkleed, C. E	14	.0382	.110	Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

U. S. P. IX: One gm. of the extract to represent 4 gm. of the drug. Glucose to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 536, and Abstr. Prop. Changes, Part 3, 1914, p. 13.

U. S. P. IX: To require that 100 cc. of the fluid extract of hyoscyamus contain not less than 0.055 nor more than 0.075 gm. of the mydriatic alkaloids of hyoscyamus.—J. Am. Pharm. Assoc. 1914, v. 3, p. 993, and Abstr. Prop. Changes, Part 4, 1914, p. 10.

Thorburn, A. D.: Fluid extract of hyoscyamus was found to vary from 13 to 39 per cent below standard.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 212.

Braun, Israel: Among the group of remedies consisting of hyoscyamus, stramonium, and lobelia, the first named is the most serviceable in the treatment of bronchial asthma.—Merck's Arch. 1914, v. 16, p. 106.

Becker, Henry C.: In the treatment of epilepsy, hyoscyamus may be given in extract form in 1 to 2 grain doses.—Merck's Arch. 1914, v. 16, p. 36.

HYPOPHYSIS.

Heidelberg, Pittenger, and Vanderkleed: A pharmacodynamic study of the pituitary gland with tests of a new product; illustrated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 808–815.

Puckner, W. A.: A report on a solution of pituitary extract or an aqueous sterile solution of the posterior (infundibular) lobe of the pituitary gland of the ox.—J. Am. M. Assoc. 1914, v. 63, p. 2043.

Roth, George B.: Report of an examination of some commercial preparations made from the posterior lobe of the pituitary body.—J. Am. M. Assoc. 1914, v. 63, p. 476–479; also Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 160–168.

Bouin and Ancel: A process for the isolation of the active substance of the posterior lobe of the hypophysis.—Compt. rend. Soc. biol. 1914, v. 76, p. 62–64. See also: p. 110–112.

Roth, G. B.: Pituitary standardization. A comparison of the physiological activity of some commercial pituitary preparations with a number of tracings.—Bull Hyg. Lab. No. 100, p. 5–42.

Crawford and Ostenberg: The pressor compounds of the pituitary gland.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 126. See also: Am. J. Pharm. 1914, v. 86, p. 291–306.

Niculescu, Petre: The relation of the physiological actions of hypophysis extract, adrenin, ergot preparations, and beta-imidazolylethylamine.—Ztschr. exper. Path. u. Therap. 1914, v. 15, p. 1–11. See also Boruttau, H., p. 11–12.

Guggenheim, M.: A contribution to our knowledge of the active principle of the hypophysis. A report of experimental work illustrated by tracings.—Biochem. Ztschr. 1914, v. 65, p. 189–218. See also Fühner, H., Berl. klin. Wchnschr. 1914, v. 51, p. 248–250.

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Hendlay, P. A.: Pituitrin in labor. A record of 60 cases, with notes on its administration.—Brit. M. J. 1914, v. 1, p. 906–907. See also p. 1098, and comments by Sanders, p. 1098.

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Richter, Ernst: A 10 per cent iodoform gauze was found to contain but 6.3 per cent of iodoform.—Apoth.-Ztg. 1914, v. 29, p. 211.

Brackett, E. G.: The use of iodoform oil in joints; with case reports.—Boston M. & S. J. 1914, v. 170, p. 873–878.

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Brown, Lucius P.: Considerable difficulty is still experienced with tincture of iodine. This comparatively simple product is found to vary from the standard both in its iodine content and its potassium iodide content. The great variations found indicate either gross carelessness, or a "don't care" attitude of mind.—Bull. Tennessee F. & D. Dept. 1914, p. 8.

Lythgoe, Hermann C.: Tincture of iodine has been examined for a longer period than any other drug, and since 1904 the ratio of adulteration has been brought down from 90 to 15 per cent.—Bull. Massachusetts Bd. Health, 1914, v. 9, p. 269.

Brown, Linwood, A.: The assay of tincture of iodine includes the determination of alcohol, the determination of free acid and the determination of potassium iodide.—J. Am. Pharm. Assoc. 1914, v. 3, p. 644–645.

Windolph, J. Fred.: Tincture of iodine does not lose under ordinary circumstances as much iodine as it loses alcohol, and hence with age it usually shows an increase in potency not always desirable.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 221.

U. S. P. IX: In making tincture of iodine, 50 gm. of potassium iodide is dissolved in 50 cc. of distilled water in a bottle, 70 gm. of iodine is then dissolved in this solution by agitation and enough alcohol added to make 1000 cc. No water was used in the former process.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1577, and Abstr. Prop. Changes, Part 6, 1914, p. 15.

Richter, Ernst: Methods for making tincture of iodine by circulatory solution.—Apoth.-Ztg. 1914, v. 29, p. 686. See also Fernau, Albert: Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 264.

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Roques, Ferdinand: The regeneration of a deteriorated tincture of iodine by the addition of iodic acid.—Apoth.-Ztg. 1914, v. 29, p. 310.

Thorburn, R. D.: Compound solution of iodine was found to be 47 per cent below standard.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 212.

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Editorial: The danger of using methylated spirit in the preparation of iodine solution.—Chem. & Drug. 1914, v. 84, p. 938.

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Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	28	20	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A	79	54	Proc. Kentucky Pharm. Assoc. 1914, p. 117.
Brown, Lucius P	5	2	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
Congdon, Leon A	11	11	Rep. Kansas Bd. Health 1914, 1914, p. 100.
Frary, Guy G	84	35	Rep. South Dakota F. & D. Com., 1914, p. 224, 260, 337.
Lythgoe, Hermann C	267	41	Rep. Massachusetts Bd. Health, 1913, p. 4–11.
Marquier, Adolph F	38	18	Proc. New Jersey Pharm. Assoc. 1914, p. 110.
Newcomb, George D	6	2	Proc. Iowa Pharm. Assoc. 1914, p. 28.
News Item	21	14	J. Am. M. Assoc. 1914, v. 62, p. 859.
Stadtmueller, Frank	39	4	Rep. Connecticut D. & F. Com. 1914, p. 15.
Strode, Sylvanus E	14	11	Rep. Ohio D. & F. Div., 1914, p. 119.
Summers, A. C	60	30	Rep. South Carolina Com. Agric. Com. & Ind. 1914, v. 10, p. 208.
Todd, A. R	132	79	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd, A. R	181	97	Bull. Michigan D. & F. Dept. 1914, January-February, p. 17, March–April, p. 19, May–June, p. 27, July–August, p. 26, September-October, p. 16, November–December, p. 22.
Wiedemann, H. E	79	55	Rep. Missouri F. & D. Com. 1914, p. 19–22.

Scoville, W. L.: A solution of iodine in benzol is stated to be the best single disinfectant for the skin, because it penetrates deeper than other effective disinfectants.—Bull. Pharm. 1914, v. 28, p. 526.

Adler and Czapski: Experimental study on the chemistry of iodine action.—Biochem. Ztschr. 1914, v. 65, p. 117–128.

Johnson, Alfred: Free iodine as a therapeutic agent.—Prescriber, 1914, v. 8, p. 117–122.

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Hobday, Frederick: The great value of iodine as an antiseptic for the skin in the surgery of animals.—Vet. J. 1914, v. 20, p. 5–6.

Nicoll, Jas. H.: Iodine in skin wounds.—Brit. M. J. 1914, v. 2, p. 814–815.

Michaud, Henri: An illustrated description of an ampoule tampon of tincture of iodine for antiseptic dressings.—Compt. rend. Soc. biol. 1914, v. 77, p. 556–557.

Schumacher, J.: Observations on disinfection with nascent tincture of iodine, and on stable, solid substitutes.—Deutsch. med. Wchnschr. 1914, v. 40, p. 1125–1126.

Wildey, A. Gascoigne: Iodine as an antiseptic in joint injuries.—Brit. M. J. 1914, v. 2, p. 1056.

Laird, John: Notes on the use of iodine and iodides.—Prescriber, 1914, v. 8, p. 151–153.

Waller, H. Ewan: On the value of iodine taken internally.—Prescriber, 1914, v. 8, p. 153–155.

Dally, J. F. Halls: Observations on the intensive nascent iodine treatment of tuberculosis.—Practitioner, 1914, v. 92, p. 804–811. See also Reeve, Edward G.: p. 812–816.

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Schwalbe, J.: The influence of iodine therapy on arteriosclerosis.—Deutsch. med. Wchnschr. 1914, v. 40, p. 749–753, 801–804.

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Kafemann, R.: Progress in iodine therapy. A review.—Berl. klin. Wchnschr. 1914, v. 8, p. 977–978.

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Gray, Robert H.: Iodine to deodorize stinking feet.—Am. J. Clin. Med. 1914, v. 21, p. 90.

Grumme-Fohrde: On the danger of the internal administration of iodine in connection with the use of mercury in the eye.—Arch. exper. Path. u. Pharmakol. 1914, v. 77, p. 448–457.

Stone, I. S.: The application of iodine and alcohol to the vagina and uterine mucosa have been productive of results which appear to be ideal.—J. Am. M. Assoc. 1914, v. 62, p. 2048.

Perret: A case of acute iodism from the injection into the vagina of 11 to 12 grammes of tincture of iodine in 2 liters of water.—Bull. Soc. Scientif. et Med. l'ouest, 1914, v. 23, p. 38–40.

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IPECACUANHA.

U. S. P. IX: Ipecac may contain not more than 10 per cent of stems. Rio ipecac and Cartagena ipecac described separately. Ash not less than 1.8 per cent and not more than 4.5 per cent. To require that ipecac contain not less than 2 per cent of ipecac alkaloids.—J. Am. Pharm. Assoc. 1914, v. 3, p. 386, 993, and Abstr. Prop. Changes, Part 2, 1914, p. 27, Part 4, p. 10.

Editorial: The U. S. P. should spell Cartagena properly; there is no "h" in the American place.—Chem. & Drug. 1914, v. 84, p. 566.

Mann, E. W.: The Ph. Brit. V requires ipecacuanha to contain not less than 2 per cent of alkaloids.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 16.

Delaye, L.: Powdered ipecac and the compliance of the commercial article with the requirements of the Ph. Belg.—Rev. Internat. Pharm. Brux. 1914, v. 2, p. 177–178.

Linke, H.: The pharmacopœia should include an ash content for ipecac not exceeding 4.5 per cent.—Apoth.-Ztg. 1914, v. 29, p. 568.

Hooper, David: The first attempts to acclimatize ipecacuanha in India were undertaken in northern India by Dr. Anderson. The Indian-grown root has been found to be medicinally active and to contain emetine equal to that found in the commercial article.—Montreal Pharm. J. 1914, v. 25, p. 5. See also Editorial: Chem. & Drug. 1914, v. 84, p. 565–566.

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Reutter, L.: A review of some of the recent literature relating to the alkaloids of ipecac.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 730–732.

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Anon.: Genuine ipecac contains five alkaloids, of which emetine and cephaeline predominate, the other three being psychotrine, ipecamine, and hydroipecamine.—Südd. Apoth.-Ztg. 1914, v. 54, p. 358.

Wellcome, Carr, and Pyman: Manufacture of emetine. English Patent 14,677, June 25, 1913.—J. Soc. Chem. Ind. 1914, v. 33, p. 102. See also p. 219 and p. 43.

Hesse, O.: A contribution to our knowledge of the alkaloids of true ipecac. The consumption and characteristics of emetine, cephaeline, psychotrine, ipecamine, and hydroipecamine, the per cent content of alkaloids, and the therapeutic action of ipecac.—Ann. Chem. 1914, v. 405, p. 1–57; also Apoth.-Ztg. 1914, v. 29, p. 430, and Pharm. J. 1914, v. 93, p. 425.

Dejussieu, Michel: The procedure for the preparation of emetine hydrochloride proposed by Fromment and a comparative presentation of the method of assay for ipecac included in the codex for 1908.—Bull. pharm. sud-est, 1914, v. 19, p. 137–139; also Répert. pharm. 1914, v. 26, p. 194–196.

Bridel, Marc: Recent work on the alkaloids of ipecac; a review.—J. pharm. et chim. 1914, v. 10, p. 273–285.

Dobbie and Fox: The relation between the absorption spectra and the constitution of certain isoquinoline alkaloids and of the alkaloids of ipecacuanha.—J. Chem. Soc. Lond. 1914, v. 105, p. 1639–1642.

Anon.: A description of alcresta ipecac, a precipitation product made by treating an extract of ipecac with Lloyd's reagent.—D.-A. Apoth.-Ztg. 1914, v. 35, p. 51.

Rippetoe, J. R.: Eight samples of ipecac contained from 3.40 to 4.63 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 444.

Maines, E. L.: Ipecac was found to contain from 3.28 to 8.05 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Ipecac contained from 3.1 to 5.5 per cent of ash, from 25.6 to 36.6 per cent of extract soluble in water, and from 20.4 to 25.7 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

Caesar & Loretz: The valuation of ipecac root, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 94–96.

van der Wielen and Reens: An assay of the sample of ipecacuanha by the methods official in 10 pharmacopœias gave a variation of from 1.67 per cent by the U. S. P. to 2.15 per cent by the Ph. Austr.—Pharm. J. 1914, v. 92, p. 541.

Dichgans, H.: A comparison of the several official assay methods shows them to give results varying from 1.927 Ph. Japon., to 2.6, Ph. Austr. The direct titration method does not give as constant result as does residual titration.—Apoth.-Ztg. 1914, v. 29, p. 381–382.

Caesar & Loretz: A review of some critical comments on the article by Diehgans on the comparative value of several assay methods for ipecac.—Jahres-Ber. 1914, p. 25–26. See also Diehgans, H.: Apoth.-Ztg. 1914, v. 29, p. 358, 368, 378, 391.

Ewe and Vanderkleed: Effect of heat on ipecac alkaloids. If allowed to remain on the steam bath after the ethereal layer has evaporated, darkening and disintegration of the alkaloids results.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 277.

Otabe, S.: The Ph. Japon. III method for the assay of ipecac is not so satisfactory as that of the Ph. Germ. V.—J. Pharm. Soc. Japan, 1914, June, p. 623. See also Asahina, Y., p. 627.

Neal, P. C.: Of 26 samples of ipecac examined, 23 were accepted and 3 were rejected.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

Table showing reported variation in alkaloidal content of ipecac.

Reporters.	Number of samples.	Alkaloidal principles.		References.
		Minimum.	Maximum.	
Hankey, William T.	8	1.24	2.21	Proc. Ohio Pharm. Assoc., 1914, p. 49.
Jensen, H. R.	18	1.63	2.35	Evans' An. Notes, 1914, p. 38.
Mann, E. W.	20	1.69	2.56	Ann. Rep. Southall Bros. & Barclay, 1914, p. 16.
Patch, E. L.	3	1.837	2.40	J. Am. Pharm. Assoc., 1914, v. 3, p. 1288.
Roberts, J. G.	9	.823	2.50	Proc. Pennsylvania Pharm. Assoc., 1914, p. 142.
Scoville, W. L.	1	1.58	....	J. Am. Pharm. Assoc., 1914, v. 3, p. 1288.
Vanderkleed, C. E.	23	.950	2.52	Proc. Pennsylvania Pharm. Assoc., 1914 p. 160.

U. S. P. IX: To require that 100 cc. of the fluid extract of ipecac yield not less than 1.8 nor more than 2.2 gm. of the ether-soluble alkaloids of ipecac.—J. Am. Pharm. Assoc. 1914, v. 3, p. 993, and Abstr. Prop. Changes, Part 4, 1914, p. 10.

Editorial: The discovery of the value of emetine and the use of emetine as a specific for amebic dysentery.—Am. Med. 1914, v. 20, p. 3.

Miller, Joseph L.: The clinical value of expectorants. Ammonium carbonate and ammonium chloride and the emetic group of expectorants, as apomorphine and ipecac when given in sufficiently large doses to animals increase bronchial secretion.—Am. J. M. Sc. 1914, v. 148, p. 475.

Yeomans, Frank C.: Amebic dysentery, with special reference to its treatment with emetine.—New York M. J. 1914, v. 99, p. 327–331.

Low, George C.: Recent researches on emetine and its value as a therapeutic agent in amebiasis and other diseases.—Proc. Roy. Soc. Med. Therap. & Pharmacol. Sec. 1914, v. 7, p. 41–49.

Mayer, Martin: Contribution on the emetine treatment of dysentery.—Münch. med. Wchnschr. 1914, v. 61, p. 241–242. See also p. 1733.

Holt, John M.: The use of emetine in amebic dysentery.—Public Health Rep. 1914, v. 29, p. 2005–2007.

Dudley, F. A.: Emetine hydrochloride and aspiration in the treatment of amebic dysentery and liver abscess.—Therap. Gaz. 1914, v. 38, p. 390–392.

Sandwith, F. M.: The alkaloids of ipecac and the use of emetine in the treatment of dysentery.—Lancet, 1914, v. 187, p. 732. See also Chepmell, I. D., p. 767.

Raeburn, James A.: Subcutaneous injections of emetine in pulmonary tuberculosis.—Brit. M. J. 1914, v. 1, p. 703–704.

Philipps, Llewellyn: The sufficiency of emetine to bring about a radical cure in amebiasis.—Brit. M. J. 1914, v. 2, p. 1061.

Spehl and Colard: A case of poisoning by emetine hydrochloride administered in the treatment of amebic dysentery.—Drug. Circ. 1914, v. 58, p. 527.

Collins, H. S.: Unusual effects of ipecac. Acute inflammation of the eyes caused by crude ipecac alkaloids.—Pharm. J. 1914, v. 92, p. 316.

Cripps, Douglas H.: Two cases in which after grinding quite small quantities of ipecac bleeding of the nose ensued.—Pharm. J. 1914, v. 92, p. 218.

For additional references see: Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

JALAPA.

U. S. P. IX: Description elaborated. Ash not exceeding 6.5 per cent. In the assay of jalap, the drug is to be extracted with alcohol. Percolate washed with chloroform after the addition of water. The chloroform solution to be evaported on a water bath.—J. Am. Pharm. Assoc. 1914, v. 3, p. 386, 994, and Abstr. Prop. Changes, Part 2, 1914, p. 28, Part 4, p. 11.

Fernau, Albert: The Ph. Austr. assay method for jalap should be made to read more definitely.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 263.

Hooper, David: Experiments made in the cultivation of jalap tubers near Ootacamund, Nilgiri Hills, prior to 1870.—Montreal Pharm. J. 1914, v. 25, p. 5.

Gehe & Co.: The supply of jalap far exceeds the demand, and prices are correspondingly low.—Handelsbericht, 1914, p. 121.

Caesar & Loretz: The valuation of jalap, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 118–119.

Rippetoe, J. R.: Seven samples of jalap contained from 0.62 to 1.77 per cent of ash; average 1.29 per cent.—Am. J. Pharm. 1914, v. 86, p. 444.

J. D. Riedel, A.-G.: Jalap contained from 3.2 to 4.8 per cent of ash and from 16.9 to 21.5 per cent of extract soluble in alcohol.—Riedel's Berichte, 1914, p. 33.

Neal, P. C.: Of 31 samples of jalap examined 25 were accepted and 6 were rejected.—Proc. Maryland Pharm. Assoc. 1914, p. 95.

Table showing reported variation in resin content of jalap.

Reporters.	Number of samples.	Resin content.		References.
		Minimum.	Maximum.	
Caesar & Loretz	12	3.30	11.72	Jahres-Ber. 1914, p. 40.
Jensen, H. R	9	8.20	10.60	Evans' An. Notes, 1914, p. 39.
Mann, E. W	4	5.80	14.00	Ann. Rep. Southall Bros. & Barclay, 1914, p. 16.
Patch, E. L	5	3.57	9.67	J. Am. Pharm. Assoc. 1914, v. 3, p. 1288.
Roberts, J. G	11	6.30	9.97	Proc. Pennsylvania Pharm. Assoc. 1914, p. 143.
Vanderkleed, C. E	13	5.07	9.24	Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

KAOLINUM.

Keenan, Thomas J.: The interesting history of kaolin and its uses.—Am. Druggist, 1914, v. 62, p. 55–57; also Pharm. Era, 1914, v. 47, p. 70–71.

E'we, G. E.: The seven samples of kaolin examined were all free from carbonates; one of the samples produced a very much thinner cataplasm than usual.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 143.

Rohland, Paul: The behavior of clays and kaolins toward hydroxylions.—Biochem. Ztschr. 1914, v. 58, p. 202–204.

Harris, J. E.: Some adsorption phenomena in soils and kaolin. The relation of the adsorption problem to the nature of the soil.—J. Phys. Chem. 1914, v. 18, p. 355–372.

Rohland, Paul: The adsorption property of kaolin.—Kolloid Ztschr. 1914, v. 14, p. 193–195.

Curry, Gordon L.: Cataplasma kaolini is unsatisfactory as made in kilo lots; difficult to stir without special machinery; considered unpractical.—Proc. Kentucky Pharm. Assoc. 1914, p. 56.

Llewellyn, H. D.: The addition of 100 gm. of glycerin to the present formula for cataplasma koalini would make a more desirable preparation for either hot or cold use.—Proc. Missouri Pharm. Assoc. 1914, p. 141.

Anon.: Cataplasma kaolini is a preparation of glycerin with kaolin as an incipient rather than a preparation of kaolin.—Chem. & Drug. Australas. 1914, v. 29, p. 243.

Richter, Ernst: Method of making sterilized bolus alba for use as a medicine.—Apoth.-Ztg. 1914, v. 29, p. 978.

Stumpf, Julius: The use of bolus alba in diarrhea, dysentery, and Asiatic cholera.—Münch. med. Wchnschr. 1914, v. 61, p. 2050–2052. See also Pick, Alois: Pharm. Post. 1914, v. 47, p. 793, and p. 793–794.

v. Wilucki: The use of bolus alba in the treatment of paratyphoid.—Münch. med. Wchnschr. 1914, v. 61, p. 2356.

Fleissig: A review of some of the recent literature relating to the treatment of cholera by means of bolus alba.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 582–583.

KIESELGUHR.

U. S. P. IX: Purified kieselguhr is to consist of the frustules and fragments of diatoms, purified by boiling with diluted hydrochloric acid. It should not contain more than 10 per cent of hygroscopic moisture.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1577, and Abstr. Prop. Changes, Part 6, 1914, p. 15.

KINO.

U. S. P. IX: The spontaneously dried juice. varying in color from a dark reddish brown to a red black. Moisture content not more than 12 per cent. Ash not exceeding 3 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 387, and Abstr. Prop. Changes, Part 2, 1914, p. 28.

Mann, E. W.: The Ph. Brit. V requires the drug to be soluble in boiling water to the extent of 75 per cent, as against the former requirement of 80 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 17.

E'we, G. E.: One lot of kino assayed 69.6 per cent of alcohol soluble matter and 3.85 per cent of ether soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 144.

Rippetoe, J. R.: One sample of kino was found to contain 62.43 per cent of alcohol extract, 67.96 per cent of water extract, and 2.83 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

KRAMERIA.

U. S. P. IX: The drug may include not more than 5 per cent of stems. Aqueous extract not less than 9 per cent. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 387, and Abstr. Prop. Changes, Part 2, 1914, p. 29.

Helch, Hans: Identity reaction for the constituents of krameria would be desirable in connection with the fluid extract of krameria.—Pharm. Post, 1914, v. 47, p. 573.

Rippetoe, J. R.: One sample of krameria was found to contain 28.54 per cent of alcohol (49 per cent) extract, and 1.35 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

Linke, H.: Two samples of krameria gave 3.28 and 7.36 per cent of ash, respectively.—Apoth.-Ztg. 1914. v. 29, p. 568.

Smith, Ernest R.: The proposed fluid glycerate of krameria has every appearance of being a good preparation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 324.

LACTUCARIUM.

U. S. P. IX: Boiling water extract of lactucarium should be clear while hot, but on cooling it should be turbid free from starch. Ash not exceeding 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 387, and Abstr. Prop. Changes, Part 2, 1914, p. 29.

van Itallie, I.: The collection of lactucarium.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 954–955; also Répert. pharm. 1914, v. 26, p. 1.

Rippetoe, J. R.: One sample of lactucarium was found to contain 44.21 per cent of alcohol extract, 27.82 per cent of water extract, and 0.71 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

Roberts, J. G.: One lot of lactucarium was considered unsatisfactory on account of the presence of a lot of moldy pieces.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 144.

Sayre, L. E.: Sirup of lactucarium. The modified formula for sirup of lactucarium, suggested by Beringer, is indorsed.—J. Am. Pharm. Assoc. 1914, v. 3, p. 237–239.

LAPPA.

Maines, E. L.: Burdock root was found to contain from 4.20 to 10.45 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Rippetoe, J. R.: One sample of lappa was found to contain 24.90 per cent of alcohol (49 per cent) extract, and 6.22 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

LEPTANDRA.

U. S. P. IX.: Leptandra may include not more than 5 per cent of stems and other foreign matter. Description somewhat elaborated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 388, and Abstr. Prop. Changes, 1914, Part 2, p. 30.

Editorial: Leptandra acts on the liver with very little action on the bowels.—Phys. Drug. News, 1914, v. 9, p. 363.

Jones, George F.: Leptandra is a valuable auxiliary in the treatment of jaundice.—Ellingwood's Therap. 1914, v. 8, p. 411–412.

LIMONIS CORTEX.

U. S. P. IX: The outer rind of the fresh ripe fruit.—J. Am. Pharm. Assoc. 1914, v. 3, p. 388, and Abstr. Prop. Changes, Part 2, 1914, p. 30.

Roure-Bertrand Fils: Tables showing the production and destination of Messina lemons during the years 1911, 1912, and 1913.—Sc. & Ind. Bul. April, 1914, p. 50.

Rowland, E. O.: Formula for glycerin preparations of lemon and orange.—Pharm. J. 1914, v. 92, p. 544–545.

U. S. P. IX: For making the tincture the lemon peel is to be grated from the fresh fruit.—J. Am. Pharm. Assoc. 1914, v. 3, p. 547, and Abstr. Prop. Changes, Part 3, 1914, p. 24.

Bradford, H. C.: Formula and directions for making extracts of lemon for flavoring.—Drug. Circ. 1914, v. 58, p. 71–73.

Little, L. D.: A colorimetric method for the determination of citral in extracts of lemon and in oil of lemon.—J. Am. Pharm. Assoc. 1914, v. 3, p. 553–556.

Table showing some of the analytical results reported for extract of lemon.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	21	7	Rep. Indiana Bd. Health, 1914, p. 396.
Hortvet, Julius	120	42	Rep. Minnesota D. & F. Com., 1914, p. 57.
Lynch, L. R	64	11	Rep. District of Columbia, Health Off. 1913, Washington, 1914, p. 90.
Lythgoe, Herman C	9	4	Rep. Massachusetts Bd. Health, 1913, 1914, p. 410.
Wiedemann, H. E	8	5	Rep. Missouri F. & D. Com. 1914, p. 39.

Hague, George W.: An official formula is needed for sirup of lemon. Many pharmacists use the soda-fountain sirup of lemon, which was official in one of the earlier pharmacopœias.—Merck's Rep. 1914, v. 23, p. 33.

LIMONIS SUCCUS.

Thurston, Azor: The commercial lemon juice, so called, is usually of inferior quality. Two samples were found to contain 4.55 and 5.67 per cent citric acid, while two samples of pure lemon juice were found to contain 6.97 and 7.79 per cent of citric acid, respectively.—Midl. Drug. 1914, v. 48, p. 363.

LINIMENTA.

Latham, Thomas: The liniments of the U. S. P. and the N. F., with a number of suggestions and modifications.—J. Am. Pharm. Assoc. 1914, v. 3, p. 234–237.

Curry, Gordon L.: Of the eight official liniments none requires any great amount of skill or labor to make.—Proc. Kentucky Pharm. Assoc. 1914, p. 58.

Linimentum aconiti et chloroformi, N. F.—Latham, Thomas: The excellent liniment of aconite and chloroform of the N. F. can be improved by the addition of menthol, 20 gm.—J. Am. Pharm. Assoc. 1914, v. 3, p. 235.

Linimentum ammonii.—U. S. P. IX: Oil of sesame to be used in making liniment of ammonia.—J. Am. Pharm. Assoc. 1914, v. 3, p. 550, and Abstr. Prop. Changes, Part 3, 1914, p. 27.

Latham, Thomas: Suggests the use of a mixture of ammonia water, liquid petrolatum, and oleic acid in place of the formula now in use.—J. Am. Pharm. Assoc. 1914, v. 3, p. 234.

Linimentum Calcis.—Latham, Thomas: In making Carron oil it is important to use limewater of standard strength and to add the linseed oil to the limewater.—J. Am. Pharm. Assoc. 1914, v. 3, p. 234.

Linimentum Camphoræ.—U. S. P. IX: Liniment of camphor to be made by heating the camphor by agitation in oil previously heated on a water bath.—J. Am. Pharm. Assoc. 1914, v. 3, p. 550, and Abstr. Prop. Changes, Part 3, 1914, p. 27.

Mills, Ralph: The Pharmacopœia directions might be changed to read: Heat the oil in a flask on a water bath, add the camphor and dissolve without further heat.—Southern Pharm. J. 1914, v. 6, p. 536.

Seibert, O. J.: Camphor can be dissolved in sesame oil by first powdering the camphor by means of alcohol and placing it on a filter over which the sesame oil previously sterilized and then allowed to cool is poured.—Drug. Circ. 1914, v. 58, p. 324. See also Reum, Arthur: Pacific Pharm. 1914, v. 7, p. 311.

Latham, Thomas: Camphor liniment is improved by using yellow paraffin oil in place of cottonseed oil.—J. Am. Pharm. Assoc. 1914, v. 3, p. 234. See also Williams, Ed. E.: Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

Moulton, Wm. C.: For making camphorated oil, the camphor may be shaved into small pieces by using an old-time tobacco cutter.—Bull. Pharm. 1914, v. 28, p. 296.

Orr, Will H.: For making camphor liniment without heat, introduce the camphor and cottonseed oil into a suitable flask and allow it to stand in a warm room for several days, agitating occasionally.—Bull. Pharm. 1914, v. 28, p. 209.

Toplis, W. G.: Camphorated oil should be placed in dry, clean bottles and thoroughly corked before sterilization.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 363.

Fernau, Albert: A quantitative determination of the camphor content by determining the loss of weight at 100° or the saponification number according to Frey would be a desirable addition to the Ph. Austr.—Ztschr. allgem. österr. Apoth.-Ver. 1914, v. 52, p. 262.

Guthrie, C. P.: An outline of methods used to determine the camphor in 37 samples of camphor liniment examined.—Bull. Agric. Exper. Sta. North Dakota, 1914, v. 3, p. 84–85.

Table showing some of the analytical results reported for camphor liniment.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, L. A.	4	2	Proc. Kentucky Pharm. Assoc. 1914, p. 120.
Editorial	29	2	Pharm. J. 1914, v. 92, p. 506.
Frary, Guy G.	34	22	Rep. South Dakota F. & D. Com. 1914, p. 229, 261.
Guthrie, C. P.	36	20	Bull. North Dakota Exper. Sta. Dept. 1914, v. 3, p. 83–85.
Jaffa, M. E.	27	12	Rep. California Bd. Health (1910–1912), Sacramento, 1913, p. 297.
Thurston, Azor	5	3	Proc. Ohio Pharm. Assoc. 1914, p. 43; also Midl. Drug. 1914, v. 48, p. 363.
Todd, A. R.	57	22	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd, A. R.	47	16	Bull. Michigan D. & F. Dept. 1914, January–February, p. 17, March–April, p. 19, May–June, p. 27, July–August, p. 26, September–October, p. 16, November–December, p. 22.

Lanscoff, J. Leon: Camphorated oil in ampoules, simple apparatus for filling: illustrated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 689–691; also Merck's Rep. 1914, v. 23, p. 167.

Kollo, Konstantin: Ampoules of camphorated oil should be prepared with oil purified by the use of alcohol and should be sterilized by Tyndallizing at 80°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

Miller, D. J. Milton: A child 18 months old was given a brimming teaspoonful of camphorated oil by mistake. No untoward symptoms resulted.—J. Am. M. Assoc. 1914, v. 63, p. 579.

Linimentum Chloroformi.—Latham, Thomas: The official chloroform liniment is too expensive for general use and too strong. A mixture of chloroform, methyl salicylate, and paraffin oil is recommended as a substitute.—J. Am. Pharm. Assoc. 1914, v. 3, p. 234–235.

Anon.: The official chloroform liniment is a clear, straw-colored liquid. A colorless preparation is open to suspicion.—Bull. Pharm. 1914, v. 28, p. 483.

Linimentum Iodi, N. F.—Latham, Thomas: Liniment of iodine can be considered obsolete. It is never used or dispensed.—J. Am. Pharm. Assoc. 1914, v. 3, p. 236.

Linimentum Opii Compositus, N. F.—Latham, Thomas: On account of the high price and comparative uselessness of the expensive ingredients of compound liniment of opium, a modified formula containing one-tenth the amount of tincture of opium is suggested.—J. Am. Pharm. Assoc. 1914, v. 3, p. 236.

Linimentum Saponato-Camphoratum, N. F.—Latham, Thomas: This old composition is retained chiefly for historical interest. It may be made readily with any of the popular brands of white laundry soap which have a mixed base of cottonseed and coconut oils and readily solidify or jelly on cooling.—J. Am. Pharm. Assoc. 1914, v. 3, p. 236.

Linimentum Saponis.—U. S. P. IX: Directions for making modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1571, and Abstr. Prop. Changes, Part 6, 1914, p. 9.

Llewellyn, H. D.: The 1890 formula for soap liniment is preferable to that now included in the Pharmacopœia.—Proc. Missouri Pharm. Assoc. 1914, p. 142. See also Latham, Thomas: J. Am. Pharm. Assoc. 1914, v. 3, p. 235.

Todd, A. R.: Of 13 samples of soap liniment examined, 7 were found to be adulterated.—Rep. Michigan D. & F. Com. 1914, p. 176.

Todd, A. R.: Of eight samples of soap liniment examined, two were found to be adulterated, misbranded, or illegal.—Bull. Michigan D. & F. Dept. 1914, March-April, p. 19, July-August, p. 26.

Linimentum Saponis Mollis.—Latham, Thomas: Liniment of soft soap would be improved by using the cheap methyl salicylate instead of the dear oil of lavender for flavoring.—J. Am. Pharm. Assoc. 1914, v. 3, p. 235.

Linimentum Terebinthinæ.—U. S. P. IX: Added directions: "If thickened by cold, the liniment should be warmed sufficiently to render it fluid before dispensing;" otherwise no change in formula or directions.—J. Am. Pharm. Assoc. 1914, v. 3, p. 550, and Abstr. Prop. Changes, Part 3, 1914, p. 27.

Latham, Thomas: Liniment of turpentine could be improved by using petrolatum in place of rosin cerate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 235. See also Smalley, R.: Pharm. J. 1914, v. 92, p. 274. See also p. 461.

Linimentum Terebinthinæ Aceticum, N. F.—Latham, Thomas: This deservedly popular liniment has stood the test of about 150 years' use and when properly made is an elegant emulsion. A formula containing saponin and otherwise modified to reduce the cost of the preparation is recommended in place of the N. F. formula.—J. Am. Pharm. Assoc. 1914, v. 3, p. 236.

Linimentum Tiglii, N. F.—Latham, Thomas: Liniment of croton oil and compound liniment of croton oil are never used. The oil itself is seldom prescribed.—J. Am. Pharm. Assoc. 1914, v. 3, p. 237.

LINUM.

U. S. P. IX: The flaxseed may include not more than 3 per cent of other harmless fruits, seeds, and foreign matter. Flaxseed meal should be recently prepared and free from unpleasant or rancid odor. Ash not exceeding 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 388, and Abstr. Prop. Changes, Part 2, 1914, p. 30.

Winton, Kate B.: The histology of the flax fruit; illustrated.—Bot. Gaz. 1914, v. 58, p. 445–448.

News Note: A review of the flaxseed situation.—Oil, Paint & Drug Rep. 1914, v. 85, February 9, p. 18. See also March 16, p. 9, and Drugs, Oils & Paints, 1914, v. 29, p. 368–369.

Noyes, C. R.: Linseed depends for its value wholly upon the presence of linseed oil and yet ground flaxseed, or linseed meal of the market, is very frequently a product which has been partly reduced to the condition of ground oil cake.—J. Am. Pharm. Assoc. 1914, v. 3, p. 856, and Proc. Minnesota Pharm. Assoc. 1914, p. 192. See also Midl. Drug. 1914, v. 48, p. 145–146.

Collins and Blair: The rate of liberation of hydrocyanic acid from linseed.—Analyst, 1914, v. 49, p. 70–74.

Van Kampen, G. B.: On the amount of water-soluble carbohydrates in linseed.—Chem. Weekblad, 1914, v. 11, p. 142–146.

J. D. Riedel, A. G.: Linseed contained from 3.3 to 4.5 per cent of ash and from 15.6 to 20 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 33.

Jensen, H. R.: One sample of crushed seeds left 3.1 per cent ash, and contained 35.5 per cent of oil, with iodine value 182, refractive index 1.4826.—Evans' An. Notes, 1914, p. 43.

Mayer, Joseph L.: The oil content of eight samples of ground flaxseed was found to vary from 33.31 to 35.46 per cent.—Proc. New York Pharm. Assoc. 1914, p. 115.

LIQUORES.

U. S. P. IX: Changes and new standards for solutions.—J. Am. Pharm. Assoc. 1914, v. 3, p. 527–533, and Abstr. Prop. Changes, Part 3, 1914, p. 4–10.

Mittelbach, Wm.: The official solutions will probably receive more attention than any other group and processes for assaying them are being adopted.—Proc. Missouri Pharm. Assoc. 1914, p. 106.

Curry, Gordon L.: Of the 25 official solutions, only 1, the solution of formaldehyde, can not be made advantageously in the retail drug store.—Proc. Kentucky Pharm Assoc. 1914, p. 58.

LIQUOR ANTISEPTICUS.

LaWall, Charles H.: A new and satisfactory formula for liquor antisepticus. The product is thought to be more pleasant and fragrant than that yielded by the formula now in the U. S. P. VIII.—J. Am. Pharm. Assoc. 1914, v. 3, p. 507; also Nat. Druggist, 1914, v. 44, p. 452.

LIQUOR ANTISEPTICUS ALKALINUS, N. F.

LaWall, Charles H.: A new and satisfactory formula for liquor antisepticus alkalinus, to replace the formula now in the N. F. III.—J. Am. Pharm. Assoc. 1914, v. 3, p. 508; also Nat. Druggist, 1914, v. 44, p. 452, and Apothecary, 1914, v. 26, January, p. 20.

McElhenie, Thos. D.: Suggests the name "Alkantus" for the alkaline antiseptic solution of the National Formulary.—J. Am. Pharm. Assoc. 1914, v. 3, p. 276. See also Drug. Circ. 1914, v. 58, p. 195.

Hague, George W.: In alkaline antiseptic solution the color fades on standing.—Merck's Rep. 1914, v. 23, p. 33.

Puckner, W. A.: A report on glyco-thymoline and the evident variations in its composition.—Rep. Council Pharm. Chem. 1914, p. 54–57.

Editorial: Glyco-thymoline is inferentially recommended in such serious conditions as diphtheria, ophthalmia in the new-born, consumption, etc. The danger of such recommendations, even though made indirectly rather than directly, are patent to every thinking physician.—J. Am. M. Assoc. 1914, v. 63, p. 1305.

LIQUOR CALCIS.

Williams, Ed. E.: A magma of calcium hydrate should be made official for the preparation of lime water. Preserved in suitably sized bottles, paraffin stoppered, it is a permanent preparation.—Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

Anderson, F. A.: Apparatus for preparing lime water, or the like, for use in softening or purifying water. English Patent 3504, February 11, 1913.—J. Soc. Chem. Ind. 1914, v. 33, p. 331.

Raubenheimer, Otto: Do not prepare liquor calcis by mixing together a pail of hydrant water and a lump of ordinary mason's lime by means of a broom handle, but use U. S. P. process, employing calcium oxide and distilled water.—Jour. New Jersey Pharm. Assoc. 1914, p. 36.

Howard, Charles D.: A specimen of lime water tablet examined showed 42 per cent of the U. S. P. requirement when made up according to the instructions.—Bull. New Hampshire Bd. Health, 1914, v. 3, p. 67.

Table showing some of the analytical results reported for lime water.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, L. A.	5	1	Proc. Kentucky Pharm. Assoc. 1914, p. 119.
Brown, Lucius P.	7	0	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
Summers, A. C.	23	4	Rep. South Carolina Agric. Com. & Ind. 1914, v. 10, p. 208.
Todd, A. R.	1	0	Rep. Michigan D. & F. Com. 1914, p. 176.
Wiedemann, H. E.	72	16	Rep. Missouri F. & D. Com. 1914, p. 22–24.

LIQUOR CALCIS SULPHURATÆ, N. F.

Mayer, Joseph L.: Preparation and analysis of Vleminck's solution.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1000–1002; also Am. J. Pharm. 1914, v. 86, p. 355–358.

LIQUOR CHLORI COMPOSITUS.

U. S. P. IX: Rubric to read: "A mixture of chlorine and chlorine oxides equivalent to at least 0.35 gm. of chlorine in each 100 cc. of the solution." Modified tests and a method of assay included.—J. Am. Pharm. Assoc. 1914, v. 3, p. 528, and Abstr. Prop. Changes, Part 3, 1914, p. 5.

LIQUOR CRESOLIS COMPOSITUS.

U. S. P. IX: Modified formula. Linseed oil reduced to 300 gm. to be saponified with the aid of heat before the addition of the cresol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 528, and Abstr. Prop. Changes, Part 3, 1914, p. 5.

Maines and Gardner: An improved formula for compound solution of cresol, including the suggestion to saponify the potassium hydroxide before adding the cresol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1325. See also Mills, Ralph: Southern Pharm. J. 1914, v. 6, p. 535, and Williams, Ed. E.: Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

Bray, Wm.: For making compound cresol solution recommends the use of equal parts of sapo mollis and cresol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 901. See also Norwood, T. W.: Drug. Circ. 1914, v. 58, p. 390, and Curry, Gordon L.: Proc. Kentucky Pharm. Assoc. 1914, p. 58.

Nixon, C. F.: For compound solution of cresol, cotton seed oil should be used instead of linseed oil.—Apothecary, 1914, v. 26, January, p. 20. See also Endress, John C.: Bull. Pharm. 1914, v. 28, p. 339, and Ewe and Vanderkleed: Proc. Pennsylvania Pharm. Assoc. 1914, p. 277.

Goerlich, R.: The valuation of the Ph. Germ. V solution of cresol.—Pharm. Ztg. 1914, v. 59, p. 580–582. See also Herzog and Kleinmichel: Apoth.-Ztg. 1914, v. 29, p. 402–403, and Anon.: Südd. Apoth.-Ztg. 1914, v. 54, p. 341.

Report of the Pharmacy Board of Victoria: The increasing number of fatalities through the improper use of lysol was a matter of anxiety to the board in the early part of the year.—Chem. & Drug. Australas. 1914, v. 29, p. 123. See also p. 358.

Xrayser II: Lysol is a descriptive term and as such it is claimed should not be in the register at all.—Chem. & Drug. 1914, v. 85, p. 479.

LIQUOR FERRI ALBUMINATI, N. F.

Wastenson, Hugo: The official Swedish solution of iron albuminate and the precautions to be observed in preparing it.—Svensk farm. Tidskr. 1914, v. 18, p. 233–235.

Solonoutz, J.: The Ph. Ross. V formula for solution of iron albuminate yields a uniformly satisfactory preparation.—Pharm. Ztg. 1914, v. 59, p. 252–253.

Lefeldt, M.: The Ph. Germ. V should permit of a slight variation in the iron content of solution of iron albuminate.—Pharm. Ztg. 1914, v. 59, p. 42.

Arends, Georg: In making solution of iron albuminate, it is preferable to first determine the exact amount of albumin necessary to bring the iron into complete solution.—Apoth.-Ztg. 1914, v. 29, p. 987.

J. D. Riedel, A.-G.: The specific gravity of the Ph. Germ. V preparation was found to vary from 0.980 to 0.990, the dry residue from 2.1 to 2.4 per cent, and the iron content from 0.39 to 0.40.—Riedel's Berichte, 1914, p. 45.

LIQUOR FERRI ET AMMONII ACETATIS.

U. S. P. IX: Specific gravity about 1.0385. Tests modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 528, and Abstr. Prop. Changes, Part 3, 1914, p. 5.

McClure, Berthier: A quick and practical method for dispensing Basham's mixture. Make the solution without iron and add a sufficient quantity of tincture of chloride of iron when needed.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 344.

Williams, Ed. E.: Basham's mixture should be kept on ice and is a permanent preparation when so stored.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

LIQUOR FERRI PEPTONATI CUM MANGANO, N. F.

Williams, Ed. E.: In manufacturing the N. F. solution of peptonate of iron and manganese be particular to use a peptonate of iron devoid of odor.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

J. D. Riedel, A.-G.: The specific gravity of solution of peptonate of iron and manganate was found to vary from 1.049 to 1.053, the dry residue from 14.5 to 15.8 per cent, and the iron content from 0.61 to 0.66 per cent.—Riedel's Berichte, 1914, p. 45.

Puckner, W. A.: Report on Pepto-Mangan (Gude).—Rep. Council Pharm. Chem. 1914, p. 121–123.

LIQUOR FORMALDEHYDI.

U. S. P. IX: To permit from 7 to 14 per cent of methyl alcohol to prevent polymerization. Specific gravity from 1.070 to 1.095 at 25°. Yield of ash on ignition should not exceed 0.05 per cent. Tests modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 529, and Abstr. Prop. Changes, Part 3, 1914, p. 6.

von Hochstetter, H.: U. S. Patent 1,110,289. The manufacture of formaldehyde.—J. Ind. & Eng. Chem. 1914, v. 6, p. 1050. See also Pollak, E.: J. Soc. Chem. Ind. 1914, v. 33, p. 218.

Fernau, Albert: For solution of formaldehyde a minimum content of 38 volume per cent or 35 weight per cent would be preferable to the present requirement of the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 253.

Dunning, H. A. B. Detection and estimation of minute quantities of formaldehyde in presence of hexamethylenamine and of methyl alcohol in presence of ethyl alcohol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 637–641.

Fincke, Heinrich: On the detection of minute quantities of formaldehyde and of several formaldehyde combinations by means of fuchsin-sulphurous acid-hydrochloric acid.—Ztschr. unters. Nahr. u. Genuss. 1914, v. 27, p. 246–253.

Stüwe, W.: The determination of formaldehyde, hexamethylenetetramine, and formalin pastilles.—Arch. Pharm. 1914, v. 252, p. 430–435; also Südd. Apoth.-Ztg. 1914, v. 54, p. 638.

Redman, Weith and Brock: The determination of phenol in the presence of hexamethylenetetramine and formaldehyde.—J. Ind. & Eng. Chem. 1914, v. 6, p. 205–206.

Rupp, E.: Outline of method for determining the formaldehyde content according to Romijn.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 314.

Linke, H.: Twelve samples of solution of formaldehyde were found to comply with the Ph. Germ. V requirements.—Apoth.-Ztg. 1914, v. 29, p. 683.

Mayer, Joseph L.: Ten samples of formaldehyde solution contained 35.01 per cent to 37.61 per cent of formaldehyde.—Proc. New York Pharm. Assoc. 1914, p. 115.

E'we, G. E.: Of 11 samples of formaldehyde solution tested, 9 tested from 37 to 39.9 per cent, while the other 2 tested 36.8 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 138.

Dunlop, J. G. M.: The action of sulphuric acid on paraformaldehyde.—J. Chem. Soc. Lond. 1914, v. 105, p. 1155–1157.

Anon.: Directions for using the permanganate process for the generation of formaldehyde.—Pharm. Era, 1914, v. 47, p. 465.

Dixon, Samuel G.: Sodium dichromate and sulphuric acid as a substitute for potassium permanganate to liberate formaldehyde gas from a water solution.—J. Am. M. Assoc. 1914, v. 63, p. 1025.

Auerbach and Plüddemann: Studies of formaldehyde. IV. The vaporization of formaldehyde and its polymers.—Arb. k. Gsndhtsamte, 1914, v. 47, p. 116–132.

Croner, Fr.: The influence of methyl alcohol on the disinfectant action of formaldehyde and the conclusions derived therefrom.—Ztschr. Hyg. 1914, v. 78, p. 541–554.

Löwenstein, Walter: The disinfection of dwellings by means of formaldehyde.—Ztschr. Hyg. 1914, v. 78, p. 363–384.

Hamilton, Herbert C.: Formaldehyde is limited in its usefulness to its application as a gaseous disinfectant.—Therap. Gaz. 1914, v. 38, p. 313.

Mayer, O.: On the penetrating properties of formaldehyde vapors in steam disinfection apparatus, with or without reduced atmospheric pressure.—Münch. med. Wchnschr. 1914, v. 61, p. 132.

Dreyfus, Wm.: Review of formaldehyde fumigation.—Am. J. Public Health, 1914, v. 4, p. 1046–1049.

Anon.: There is no experimental evidence on which to base an opinion as to the actual efficiency of any of the commercially available formaldehyde sterilizers.—J. Am. M. Assoc. 1914, v. 62, p. 476.

Pabst, Charles F.: Why fumigation fails.—Med. Rec. 1914, v. 86, p. 1052.

McGuigan, Hugh: A study of the migration, fate, and changes of formaldehyde in the body.—J. Am. M. Assoc. 1914, v. 62, p. 984–989.

Serger, H.: Review of some of the recent literature relating to formaldehyde as a chemical preservative.—Chem.-Ztg. 1914, v. 38, p. 209–210.

For additional references on formaldehyde see Index Med; J. Am. M. Assoc.; Chem. Abstr.; and J. Chem. Soc. Lond.

LIQUOR MAGNESII CITRATIS.

U. S. P. IX: Formula to include the use of purified talc. To direct solutions to be heated to the boiling point before filtration.—J. Am. Pharm. Assoc. 1914, v. 3, p. 530, and Abstr. Prop. Changes, Part 3, 1914, p. 7.

Blomberg, C.: The introduction, uses, and composition of magnesium citrate, first used in Italy about the middle of the nineteenth century.—Pharm. Zentralh. 1914, v. 55, p. 1045–1046.

Mills, Ralph: Solution of magnesium citrate will keep longer if recently boiled distilled water is used in making it and the bottle is rinsed with boiling distilled water before being used.—Southern Pharm. J. 1914, v. 6, p. 536.

Brown, J. Lee: A formula for solution of magnesium citrate made by the aid of heat.—J. Am. Pharm. Assoc. 1914, v. 3, p. 968–969.

Possehl, J. J.: A revised formula and method of procedure for making solution of magnesium citrate.—Proc. Wisconsin Pharm. Assoc. 1914, p. 78–79. See also Reum, Arthur: Pacific Pharm. 1914, v. 8, p. 83–84.

Rhode, R. E.: Solution of magnesium citrate should be made by the cold process and with spirit of lemon instead of the oil.—J. Am. Pharm. Assoc. 1914, v. 3, p. 901.

Toplis, W. G.: Solution of magnesium citrate should be sterilized before adding the potassium bicarbonate.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 362.

Weinstein, Joseph: A prominent New York pharmacist is reported to have advocated the use of his formula which does away with most of the citric acid and magnesium carbonate, replacing same with sodium phosphate.—Proc. New York Pharm. Assoc. 1914, p. 116.

Brown, Linwood A.: The assay of effervescent solution of magnesium citrate. Outline for the determination of free citric acid, total citric acid, and magnesium oxide.—J. Am. Pharm. Assoc. 1914, v. 3, p. 643.

Hill, C. A.: Of 124 samples of solution of magnesium bicarbonate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 3 parts per million. The arsenic content varied from 0 to 0.8 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

McGill A.: Examination of 52 samples of the product sold as effervescent citrate of magnesia showed that it consists chiefly of magnesium sulphate (Epsom salt) with variable quantities of sodium citrate, sodium tartrate, and sugar.—Bull. Lab. Inland Rev. Dept. Ottawa, 1914, No. 297, p. 11.

LIQUOR PLUMBI SUBACETATIS.

U. S. P. IX: Method of assay modified. Tests for limit of iron and copper added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 530, and Abstr. Prop. Changes, Part 3, 1914, p. 7.

LIQUOR POTASSII ARSENITIS.

U. S. P. IX: Rubric to require the equivalent of not less than 0.975 and not more than 1.025 per cent of arsenic trioxide. Test for arsenic added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 530, and Abstr. Prop. Changes, Part 3, 1914, p. 7.

Richter, O.: A review of the Ph. Germ. V method for making solution of potassium arsenite.—Apoth.-Ztg. 1914, v. 29, p. 962–963.

Mills, Ralph: In making the solution of potassium arsenite it will be advantageous to place the material in a flask rather than a tared dish.—Southern Pharm. J. 1914, v. 6, p. 535.

Llewellyn, H. D.: The 1890 formula for Fowler's solution had the advantage of bringing the finished product up to 1,000 cc. instead of 1,000 gm.—Proc. Missouri Pharm. Assoc. 1914, p. 142.

E'we and Vanderkleed: Rate of oxidation of arsenite in Fowler's solution.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 277. See also p. 154 and J. Am. Pharm. Assoc. 1914, v. 3, p. 1682.

Table showing some of the analytical results reported for solution of potassium arsenite.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, L. A	48	35	Proc. Kentucky Pharm. Assoc. 1914, p. 117.
Congdon, Leon A	1	0	Rep. Kansas Bd. Health, 1914, p. 100.
Frary, Guy G	5	2	Rep. South Dakota F. & D. Com., 1914, p. 227, 340.
Summers, A. C	44	10	Rep. South Carolina Com. Agric. Com. & Ind., 1914, v. 10, p. 208.
Todd, A. R	14	1	Rep. Michigan D. & F. Com., 1914, p. 176.
Todd, A. R	8	4	Bull. Michigan D. & F. Dept., 1914—May-June p. 27; July-August, p. 26; September-October, p. 16.
Wiedemann, H. E	42	37	Rep. Missouri F. & D. Com., 1914, p. 39.
Woods, Chas. D	12	12	Off. Insp. Maine Agric. Expr. Sta., 1913, No. 18, p. 24–25.

Becker, Henry C.: For the prevention of the acne that is apt to follow the administration of bromides, Fowler's solution in 5 or 10 minim doses three times daily is to be recommended.—Merck's Arch. 1914, v. 16, p. 36.

Editorial: Fowler's solution is of greatest service as a blood maker in debility with anemia.—Eclectic M. J. 1914, v. 74, p. 377–378.

LIQUOR SODÆ CHLORINATA.

U. S. P., IX: Rubric to read at least 2.5 per cent by weight of available chlorine. Modified formula and modified method of assay.—J. Am. Pharm. Assoc. 1914, v. 3, p. 531, and Abstr. Prop Changes, Part 3, 1914, p. 8.

Spencer, Leo: Photokinetics of sodium hypochlorite solutions.—J. Chem. Soc. Lond. 1914, v. 105, p. 2565–2576.

LIQUOR SODII PHOSPHATIS COMPOSITUS.

Williams, Ed. E.: Compound solution of sodium phosphate molds and crystallizes on standing and is hard to get the salt into solution.—Proc. Wisconsin Pharm. Assoc. 1914, p. 21.

Norwood, T. W.: The official compound solution of sodium phosphate is unnecessarily complicated. A satisfactory solution can be made by dissolving sodium phosphate 1,000 gm., phosphoric acid, 25 per cent, 100 gm., in water sufficient to make 1,000 cc.—Drug. Circ. 1914, v. 58, p. 390.

LITHII CARBONAS.

Fernau, Albert: A test for magnesium carbonate should be added.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Daniels, Amy L.: The influence of lithium and atophan on the uric acid excretion of a gouty patient.—Arch. Int. Med. 1914, v. 13, p. 480–484.

LITHII CITRAS.

Baker, W. L.: Lithium citrate did not conform to the U. S. P. in purity test.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Hill, C. A.: Of 52 samples of lithium citrate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 8 parts per million. The arsenic content varied from 0 to 0.3 parts per million.—Chem. & Drug. 1914, v. 85, p. 21.

LOBELIA.

U. S. P., IX: Family name changed from "Campanulaceæ" to "Lobeliaceæ." Ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 389, and Abstr. Prop. Changes, Part 2, 1914, p. 31.

Baker, W. L.: One sample of lobelia was rejected because it was mostly stalk and but very few leaves.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Rippetoe, J. R.: One sample of lobelia was found to contain 18.42 per cent of alcohol (49 per cent) extract and 8.15 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

J. D. Riedel, A.-G.: Lobelia contained from 5.1 to 11.4 per cent of ash and from 14.7 to 17.7 per cent of extract soluble in diluted (70 per cent) extract.—Riedel's Berichte, 1914, p. 32.

Maines, E. L.: Lobelia herb was found to contain 8.04 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Vanderkleed, C. E.: Reports one assay of lobelia: 0.838 per cent alkaloids; above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Atkinson, Richard M.: History of lobelia; a review.—Eclectic M. J. 1914, v. 74, p. 565.

Harbold, John E. L.: Lobelia, given hypodermatically, will seldom, if ever, nauseate a patient.—Ellingwood's Therap. 1914, v. 8, p. 412. See also Shirack, C. J.: Eclectic M. J. 1914, v. 74, p. 567–569.

Simes, Charles A.: Lobelia in broncho-pneumonia.—Ellingwood's Therap. 1914, v. 8, p. 173–174. See also Snow, H.: Eclectic M. J. 1914, v. 74, p. 565.

Woodward, C.: The antispasmodic property of lobelia.—Nat. Eclect. M. Assoc. Quart. 1914–15, v. 5, p. 334–336.

Editorial: Lobelia locally applied relieves rhus poisoning, is one of the best remedies known for bronchial asthma, and is a good cardiac stimulant.—Phys. Drug News, 1914, v. 9, p. 363. See also Braun, Israel: Merck's Arch. 1914, v. 16, p. 106.

LUPULINUM.

U. S. P. IX.: A granular powder, bright yellowish brown, having the characteristic odor and taste of hops. Ash not exceeding 16 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 390, and Abstr. Prop. Changes, Part 2, 1914, p. 32.

Baker, W. L.: Five lots of lupulin were rejected. They were deficient in ether soluble content and ash content was high.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Table showing reported variation in ash content of lupulin.

Reporters.	Number of samples.	Ash.		References.
		Minimum.	Maximum.	
Caesar & Loretz	17	11.8	29.8	Jahres-Ber. 1914, p. 39.
E'we, G. E	4	16.0	20.8	Proc. Pennsylvania Pharm. Assoc. 1914, p. 145.
Rippetoe, J. R	4	20.02	49.07	Am. J. Pharm., 1914, v. 86, p. 440.
Roberts, J. G	3	6.53	19.07	Proc. Pennsylvania Pharm. Assoc. 1914, p. 144.
Scoville, W. L	4	2.4	30.9	J. Am. Pharm. Assoc. 1914, v. 3, p. 1288.

LYCOPODIUM.

U. S. P. IX: The spores of *Lycopodium clavatum*, with not more than 2 per cent of impurities. Ash not exceeding 3 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 390, and Abstr. Prop. Changes, Part 2, 1914, p. 32.

Caesar & Loretz: The valuation of lycopodium, with table showing the requirements included in the several pharmacopœias.—Jahres-Ber. 1914, p. 89.

Richter, Ernst: One sample of lycopodium found to contain wheat starch.—Apoth.-Ztg. 1914, v. 29, p. 211.

Anselmino and Gilg: A lycopodium substitute was found to be mixed with starch, shellac, and rosin and contained about 9 per cent of ash.—Arb. pharm. Inst. Univ. Berl. 1914, p. 46–47.

Lewis, S. Judd: The moisture in a specially resifted sample of lycopodium amounted to 4.13 per cent, and the ash on the dry drug to 1.49 per cent.—Pharm. J. 1914, v. 92, p. 128; also Year-Book of Pharmacy, 1914, p. 367.

Maines, E. L.: Lycopodium was found to contain from 0.27 to 1.44 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Caesar & Loretz: Ten samples of lycopodium were found to contain from 1.4 to 5.85 per cent of ash. Only one of the samples exceeded 3 per cent.—Jahres-Ber. 1914, p. 39.

Rippetoe, J. R.: One sample of lycopodium contained 8.61 per cent of ash, which was chiefly calcium carbonate.—Am. J. Pharm. 1914, v. 86, p. 444.

Linke, H.: Two samples of lycopodium gave 1.84 and 2 per cent of ash, respectively.—Apoth.-Ztg. 1914, v. 29, p. 567.

J. D. Riedel, A.-G.: Lycopodium contained from 1.4 to 2.7 per cent of ash and from 20.2 to 21.8 per cent of extract soluble in alcohol.—Riedel's Berichte, 1914, p. 32.

MAGMA BISMUTHI.

U. S. P. IX: Magma bismuthi to contain an amount of bismuth hydroxide equivalent to not less than 5.50 gm. nor more than 6 gm. of bismuth oxide, in each 100 cc. Directions for making and the method of assay to be given.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1571–1572, and Abstr. Prop. Changes, Part 6, 1914, p. 9–10.

Müller, S. Bertha: A modified formula with directions for making magma of bismuth.—Am. J. Pharm. 1914, v. 86, p. 7–11.

Anon.: The Raubenheimer formula for milk of bismuth is reprinted.—Drug. Circ. 1914, v. 57, p. 729.

MAGMA MAGNESIÆ, N. F.

Williams, Ed. E.: The N. F. formula for milk of magnesia yields an unsatisfactory jellylike product.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23. See also Mills, Ralph: Southern Pharm. J. 1914, v. 6, p. 536, and Merck's Rep. 1914, v. 23, p. 33.

Hensel, Samuel T.: Magma magnesia; a discussion of the formula proposed by Beringer.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1117–1120; also Rocky Mountain Drug. 1914, v. 28, June, p. 8–10.

LaWall, Charles H.: The assay of magma magnesiæ. Examination of 12 samples of the product showed them to vary from 2.22 to 9.57 per cent of magnesium hydroxide.—Proc. New Jersey Pharm. Assoc. 1914, p. 78–80; also J. Am. Pharm. Assoc. 1914, v. 3, p. 1002–1003.

Dunlop, Thomas: The available products of mixture of magnesium hydroxide are very variable, some nearly solid. The problem to be solved lies in the treatment of the magnesium hydroxide after it has been collected.—Pharm. J. 1914, v. 93, p. 485.

Blair, H. C.: The making of magma magnesiæ should be left alone unless some one discovers how to make it properly and is willing to instruct us.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 346.

MAGNESII CARBONAS.

Fernau, Albert: Commercial preparations of magnesium carbonate invariably contain traces of iron. This should be recognized by the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Kolthoff, I. M.: The composition of the official Ph. Ndl. IV magnesium carbonate.—Pharm. Weekblad, 1914, v. 51, p. 1287–1291.

Stockinger, O.: Several lots of magnesium carbonate were found to contain an excessive amount of calcium. A sample from one barrel contained 10.34 per cent of calcium, calculated as calcium carbonate Of the three samples examined, one assayed 98.5 per cent and the other two each 94 per cent of magnesium carbonate after ignition. U. S. P. requires 96 per cent. One of the samples contained calcium in excess of the U. S. P. limit; in other respects they were strictly U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 145.

Mann, E. W.: One sample of magnesium carbonate when mixed with a limited quantity of water formed a fairly hard cement. On examination it was found that a considerable proportion of calcined magnesia was present.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 45.

Hill, C. A.: Of 210 samples of heavy magnesium carbonate examined during the years 1910 to 1913, inclusive, the lead content varied from 1 to 70 parts per million. The arsenic content varied from 0 to 9 parts per million.—Chem. & Drug. 1914, v. 85, p. 22.

MAGNESII OXIDUM.

Fernau, Albert: Commercial preparations of magnesium oxide invariably contain traces of iron. This should be recognized by the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Baker, W. L.: Heavy magnesium oxide was found to contain an excess of calcium.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211. See also Richter, Ernst: Apoth.-Ztg. 1914, v. 29, p. 211.

Stockinger, R.: Only one of the four samples of light magnesia examined came up to the U. S. P. requirement of 96 per cent MgO after ignition.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 146.

Hill, C. A.: Of 72 samples of heavy magnesia examined during the years 1910 to 1913, inclusive, the lead content varied from 3 to 200 parts per million. The arsenic content varied from 0.2 to 12 parts per million.—Chem. & Drug. 1914, v. 85, p. 22.

MAGNESII SULPHAS.

Foulk and Sweeny: The sulphate method for standardizing a magnesium salt solution.—J. Am. Chem. Soc. 1914, v. 36, p. 2360–2372.

Baker, W. L.: Magnesium sulphate contained an excess of heavy metals.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Mann, E. W.: Some specimens of magnesium sulphate contain an excessive proportion of chlorides. The highest figure recorded is 0.25 per cent. calculated as magnesium chloride.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 45.

Roberts, J. G.: One lot of magnesium sulphate contained 1 per cent of chlorides computed as magnesium chloride.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 145.

Hill, C. A.: Of 400 samples of magnesium sulphate examined during the years 1911 to 1913, inclusive, the lead content varied from 0 to 80 parts per million. The arsenic content varied from 0.1 to 1.2 parts per million.—Chem. & Drug. 1914, v. 85, p. 22.

Glickman, L. H.: A large variation in the moisture content of dried and powdered sulphate has been observed. Six lots tested 29, 26, 23, 17, 20.3, and 7.46 per cent water, respectively.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 145.

Umney and Bennett: Dried magnesium sulphate should contain not less than 23 per cent and not more than 31 per cent of water.—Pharm. J. 1914, v. 93, p. 135–136; also Year-Book of Pharmacy, 1914, p. 408.

Stransky, Emil: An examination of magnesium narcosis. Report of animal experiments.—Arch exper. Path. u. Pharmakol. 1914, v. 78, p. 122–153. See also Starkenstein, E.: Zentralbl. Physiol. 1914, v. 28, p. 63–70.

Gates and Meltzer: The depressive action of magnesium sulphate and sodium oxalate and the rapid antagonistic action of calcium.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 97; see also p. 23–24.

Mielke, F.: A contribution on the treatment of tetanus by means of magnesium sulphate.—Therap. Monatsh. 1914, v. 28, p. 259–260. See also v. Roznowski, J.: Therap. Gegenw. 1914, v. 55, p. 435–439.

Usener, Walther: Indications for the subcutaneous injection of magnesium sulphate in the treatment of traumatic tetanus.—Münch. med. Wchnschr. 1914, v. 61, p. 2323–2324. See also Eunike, Kurt Werner, p. 2225–2226; Stadler, H.: Berl. klin. Wchnschr. 1914, v. 51, p. 15–18, 109–113, and Weintraub, W., p. 1717–1721.

Thirolaix and Mairease: The use of magnesium sulphate in the treatment of acute articular rheumatism.—Bull. gén. therap. 1914, v. 168, p. 95–97.

Freese, E. M.: Magnesium sulphate and glycerin in the treatment of infections.—New York M. J. 1914, v. 99, p. 331–333.

Bryant, W. Sohier: Magnesium sulphate in purulent cerebrospinal streptococcic meningitis.—Boston M. & S. J. 1914, v. 171, p. 812–815.

Auer and Meltzer: Fatal action of magnesium sulphate by absorption from the intestines.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 524; also Proc. Soc. Exp. Biol. 1914, v. 11, p. 95.

For additional references see Index Med.; Zentralbl. exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

MALTUM.

U. S. P. IX: The temperature for maceration and evaporation in the manufacture of malt extract not to exceed 60°. Specific gravity not less than 1.350 nor more than 1.400 at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 536, and Abstr. Prop. Changes, Part 3, 1914, p. 13.

J. D. Riedel, A.-G.: For the valuation of malt extracts the physical characteristics such as color, taste, and odor are important.—Pharm. Zentralbl. 1914, v. 55, p. 350; also Riedel's Berichte, 1914, p. 33–40.

Graber, Howard T.: Laboratory studies on malt extract. Malt extract even after having changed to an almost black color and having a disagreeable taste is not necessarily inactive, and when properly made it is potent for at least one year.—J. Ind. & Eng. Chem. 1914, v. 6, p. 403–404.

Mounier, A.: The determination of the diastasic power of extract of malt.—Ann. chim. analyt. 1914, v. 19, p. 51–54.

Duryea, Chester B.: Industrial maltose; a review of the origin and development of the industry.—J. Ind. & Eng. Chem. 1914, v. 6, p. 419–423. See also J. Am. Chem. Soc. 1914, v. 36, p. 2385–2397, and Daish, A. J.: J. Chem. Soc. Lond. 1914, v. 105, p. 2052–20723.

MANNA.

Dorveaux, P.: The method of collecting manna in Sicily in 1776; illustrated.—Bull. sc. pharmacol. 1914, v. 21, p. 107–111.

Smit, Jan: On the methods for the quantitative determination of mannite; experimental observations.—Ztschr. Anal. Chem. 1914, v. 53, p. 470–490.

van Ekenstein and Blanksma: Observations on the crystallization of levo-rotatory mannose.—Chem. Weekblad, 1914, v. 11, p. 902.

Rippetoe, J. R.: Two samples of manna were found to contain 98.21 and 99.45 per cent of alcohol (67 per cent) extract and 1.16 and 0.57 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

Maines, E. L.: Manna was found to contain 0.62 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

MARRUBIUM.

Kremers, Edward: Illustrated description of *Marrubium vulgare* L.—Bull. Wisconsin Univ. 1914, No. 738, p. 16.

Rippetoe, J. R.: One sample of marrubium was found to contain 18.16 per cent of alcohol (49 per cent) extract and 14.66 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

MASSA FERRI CARBONATIS.

U. S. P. IX: Method of assay added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1572, and Abstr. Prop. Changes, Part 6, 1914, p. 10.

Metz, LeRoy: A formula for an improved mass of ferrous carbonate.—Pract. Drug. 1914, v. 32, p. 104–105.

MASTICHE.

Dietrich, Karl: A study of factitious and distilled mastic.—Pharm. Ztg. 1914, v. 59, p. 912.

Rippetoe, J. R.: Five samples of mastic were found to contain from 81.10 to 91.20 per cent of alcohol extract and from 0.15 to 0.56 per cent of ash. Acid number from 52.78 to 58.50.—Am. J. Pharm. 1914, v. 86, p. 440.

van Itallie, E. I.: A preparation widely recommended as a surgical dressing was found to be a solution of mastic in benzol with some methyl salicylate and rosin added.—Pharm. Weekblad, 1914, v. 51, p. 1184–1187; also Apoth.-Ztg. 1914, v. 29, p. 848, Pharm. Ztg. 1914, v. 59, p. 708, and Pharm. Post, 1914, v. 47, p. 733, 777, 857.

MATICO.

Rippetoe, J. R.: Three samples of matico leaves were found to contain from 10.80 to 15.70 per cent of alcohol extract and from 14.50 to 15.60 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 440.

Adlerman, Theodore Davis: Piper methysticum is a stand-by in the very obstinate cases of tic douloureux and facial neuralgia.—Eclectic M. J. 1914, v. 74, p. 8.

MATRICARIA.

U. S. P. IX: The dried flower heads of *Matricaria chamomilla*, with not more than 5 per cent of stems and foreign matter. Ash not exceeding 13 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 390, and Abstr. Prop. Changes, Part 2, 1914, p. 32.

Power and Browning, jr.: The constituents of the flowers of *Matricaria chamomilla*.—J. Chem. Soc. Lond. 1914, v. 105, p. 2280–2291; also Proc. Chem. Soc. 1914, v. 30, p. 237.

Maines, E. L.: Chamomile flowers were found to contain from 2 to 2.64 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Rippetoe, J. R.: One sample of Belgian chamomile flowers was found to contain 22.58 per cent of alcohol extract and 5.56 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 457.

J. D. Riedel, A.-G.: Chamomile flowers contained from 12.4 to 14.8 per cent of ash and from 28.9 to 30.8 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

Quinn, Janet D.: *Matricaria chamomilla* is an old remedy seldom used at the present time. Its properties are tonic, diaphoretic, mild emetic, and antispasmodic.—Eclectric M. J. 1914, v. 74, p. 400.

MEL.

Anon.: The second supplement to the Ph. Ndl. IV includes several modifications of the requirements for honey.—Pharm. Weekblad, 1914, v. 51, p. 85.

Fernau, Albert: The Ph. Austr. VIII requirement that an aqueous solution of honey be not darkened by ammonia is too stringent.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Gothe, F.: Experimental studies on the properties and action of honey diastase.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 28, p. 286–321.

Kreutschmar, H.: The examination of honey; a report on 58 samples.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 28, p. 84–89.

Nottbohn and Weinhauser: The determination of sulphur in honey and other sugar-containing substances.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 27, p. 581–587.

Ledent, René: A contribution to the study of Belgian honeys, with a report on 19 samples.—Bull. Soc. Chim. Belg. 1914, v. 28, p. 73–77.

Utz: A review of some of the recent literature relating to honey and the chemical examination of honey.—Pharm. Praxis, 1914, v. 12, p. 481–483.

Table showing some of the analytical results reported for honey.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	6	0	Rep. Indiana Bd. Health, 1914, p. 397.
Beythien and Hempel	54	2	Pharm. Zentralh., 1914, v. 55, p. 438.
Hortvet, Julius	33	3	Rep. Minnesota D. & F. Com., 1914, p. 47.
Mansfeld, M	11	2	Ztschr. Allgem. österr. Apoth.-Ztg., 1914, v. 68, p. 524.
Stadtmueller, F. H	2	1	Rep. Connecticut D. & F. Com., 1914, p. 15.
Street, John Phillips	2	1	Rep. Connecticut Agric. Exper. Sta., 1914, p. 333.

For additional references on honey see: Chem. Abstr.; Exper. Sta. Rec.; Ztschr. unters. Nahr. u. Genussm.; Chem. Zentralbl.; J. Chem. Soc. Lond.

MENTHA PIPERITÆ.

U. S. P. IX: Leaves more or less crumpled and frequently detached from the stems, stems quadrangular. Qualitative test for menthol added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 390, and Abstr. Prop. Changes, Part 2, 1914, p. 32.

Gattefossé, R. M.: French peppermint. The adoption of English plants and methods of rectification.—Perf. & Ess. Oil Rec. 1914, v. 5. p. 7.

Anon.: The Japanese mint industry. An illustrated review.—Chem. & Drug. 1914, v. 84, p. 213.

Baker, W. L.: Mentha piperita was found to be inferior both in color and odor.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Maines, E. L.: Peppermint herb was found to contain 12.24 to 13.07 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

J. D. Riedel, A.-G.: Peppermint contained from 10.2 to 12.7 per cent of ash and from 38.7 to 45.1 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

U. S. P. IX: Directions for making the spirit modified. Provide for the preliminary maceration of the leaves in water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 527, and Abstr. Prop. Changes, Part 3, 1914, p. 4.

Frary, Guy G.: The results on spirit of peppermint show an improved condition here and the exercise of more care on the part of druggists in making this simple preparation.—Rep. South Dakota F. & D. Com. 1914, p. 255.

Caspari, Charles, jr.: Spirit of peppermint, which the Pharmacopœia requires to contain 10 per cent by volume of oil in alcoholic solution, has been found to contain 1.5, 2, and 3 per cent, and it is sold in drug stores in bottles bearing a label giving the dose.—Proc. Maryland Pharm. Assoc. 1914, p. 72.

Williams, Ed. E.: The variation in color of essence of peppermint may be remedied by extracting the herb with water until all red color is exhausted from it. Then dry and use for coloring the essence as directed by the U. S. P.—Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

Table showing some of the analytical results reported for spirit of peppermint.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	3	2	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A	10	8	Proc. Kentucky Pharm. Assoc. 1914, p. 118.
Brown, Lucius P	2	1	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
Congdon, Leon A	12	10	Rep. Kansas Bd. Health, 1914, p. 100.
Frary, Guy G	76	42	Rep. South Dakota F. & D. Com. 1914, p. 226, 257, 338.
Hortvet, Julius	92	35	Rep. Minnesota D. & F. Com. 1914, p. 57.
Jaffa, M. E	7	1	Rep. California Bd. Health (1910–1912), Sacramento, 1913, p. 297.
Lythgoe, Hermann C	10	1	Bull. Massachusetts Bd. Health, 1914, v. 9, p. 243.
Newcomb, Geo. D	7	5	Proc. Iowa Pharm. Assoc. 1914, p. 28.
Sayre, L. E	3	1	Bull. Kansas Bd. Health, 1914, v. 10, p. 25.
Strode, Sylvanus E	2	1	Rep. Ohio D. & F. Div. 1914, p. 119.
Todd, A. R	46	31	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd, A. R	56	29	Bull. Michigan D. & F. Dept. 1914, January–February, p. 17; March–April, p. 19; July–August, p. 26; September–October, p. 16; November–December, p. 22.
Wiedemann, H. E	44	25	Rep. Missouri F. & D. Com. 1914, p. 29–30.
Woods, Chas. D	106	72	Off. Insp. Maine Agric. Exper. Sta. 1914, No. 61, p. 94–95.

MENTHOL.

Thoms, H.: The production of menthol in Germany and in the German colonies, with a table showing the physical and chemical constants of the material obtained.—Arb. pharm. Inst. Univ. Berl. 1914, p. 57.

Anon.: The Japanese mint industry. An illustrated review.—Chem. & Drug. 1914, v. 84, p. 213.

Mann, H.: The use of menthol in perfumery and cosmetics.—Spatula, 1914, v. 21, p. 84–85.

Editorial: A review of the conditions existing in the menthol market, with a report of the exports of menthol and mint oil from Japan for the years 1911 to 1913.—Chem. & Drug. 1914, v. 84. p. 180–181. See also p. 212, and Oil, Paint & Drug Rep. 1914, v. 85, February 2, p. 9.

Schimmel & Co.: The melting point of official menthol should be required to be from 42 to 44°.—Semi-Ann. Rep. April, 1914, p. 105–106. See also Südd. Apoth.-Ztg. 1914, v. 54, p. 272.

Dück: Menthol was found to have a peculiar foreign odor and to melt at from 36° to 37°.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 235.

Anon.: The congealing point of menthol and of oil of fennel is a more readily demonstrated factor than is the melting point. Menthol congeals at from 40° to 41°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 272.

Nixon, C. F.: A modified formula for compound menthol spray.—Apothecary, 1914, January, v. 26, p. 20.

Berliner: The treatment of pneumonia, pleuritis, and bronchitis with menthol and eucalyptol.—Deutsch. med. Wchnschr. 1914, v. 40, p. 2100.

METHYLIS SALICYLAS.

U. S. P. IX: General article under methyl salicylate to replace the present U. S. P. VIII text for the oil of sweet birch, oil of gaultheria, and methyl salicylate, includes the requirement that the source from which the product is derived in every case must be stated on the label.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1104, and Abstr. Prop. Changes, Part 5, 1914, p. 5.

Anon.: The Ph. Brit. V methyl salicylas or synthetic oil of wintergreen contains not less than 98 per cent of pure methyl salicylate.—Chem. & Drug. 1914, v. 85, p. 487.

Watson and Sayre: Oil of birch and methyl salicylate. Some new color reactions for the differentiation of oil of wintergreen.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1658–1659.

Editorial: The detection of added methyl salicylate by the test alleged to have been introduced by the United States Government.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 4–5. See also J. Am. Pharm. Assoc. 1914, v. 3, p. 556–557, and Schimmel & Co.: Semi-Ann. Rep. 1914, April, p. 98–99.

Murray, B. L.: The Department of Agriculture has apparently succeeded in devising a test by which oil of gaultheria, oil of betula, and synthetic methyl salicylate may be distinguished from each other and mixtures of them can be detected.—Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Patch, E. L.: Many lots of oil of birch have been condemned as mixtures of methyl salicylate and other distillates. A partial application of the new test shows its value to be at least doubtful.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1284–1286.

Latham, Thomas: A formula for analgesic liquid balm containing methyl salicylate, menthol, hydrous lanolin, and water is highly recommended as yielding a preparation which gives good satisfaction.—J. Am. Pharm. Assoc. 1914, v. 3, p. 237.

Hanzlik, Paul J.: The salicylates. A historical and critical review of the literature.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 131–189.

METHYLTHIONINÆ HYDROCHLORIDUM.

Roberts, J. G.: The presence of zinc salts was found in two samples of methylene blue. They also yielded 3.8 per cent and 7.1 per cent, respectively, as ash.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Stockinger, R.: The three samples of methylene blue examined all yielded more residue upon ignition than the 0.008 gm. per 2 gm. sample allowed by the U. S. P. One of the residues contained copper, iron, and zinc.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Francis, Thomas: Nitric acid will remove the stains of methylene blue from mortar, pestle, spatula, etc.—Bull. Pharm. 1914, v. 28, p. 296.

MISTURÆ.

Curry, Gordon L.: The four official mixtures are all familiar to the dispenser and should be made extemporaneously.—Proc. Kentucky Pharm. Assoc. 1914, p. 58.

Mistura Glycyrrhizæ Co.—Williams, Ed. E.: In making compound mixture of glycyrrhiza, heat the extract with water in a covered evaporating dish on a water bath. This greatly facilitates the solution and shortens the time of manufacture.—Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

Congdon, Leon A.: One sample of Brown's mixture; not standard.—Rep. Kansas Bd. Health, 1914, p. 100.

Mixture Rhei et Sodæ.—Williams, Ed. E.: Mixture of rhubarb and soda, U. S. P., and mixture of rhubarb compound, N. F., are nearly identical preparations—one is about one-third stronger than the other. One of these is superfluous and should be dismissed.—Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

Salicylated mixture of iron.—Amos, W. S.: Salicylated mixture of iron may have a local use somewhere, but does not appear to be of sufficient importance to justify their inclusion in the N. F.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

MORPHINA.

Anon.: The discovery of morphine. A review of the experimental work which lead to the discovery of morphine by Serturner.—Montreal Pharm. J. 1914, v. 25, p. 73–75.

Mossler, Gustav: A report of experiments on the production of opium alkaloids from the capsules.—Pharm. Post, 1914, v. 47, p. 483–486; also Pharm. Ztg. 1914, v. 59, p. 600, and Pharm. J. 1914, v. 93, p. 525.

Wilbert, M. I.: A table showing the quantities of the several narcotic drugs entered for consumption in the United States during the years 1910–1913.—Public Health Rep. 1914, v. 29, p. 3180–3183.

Marden and Elliott: Morphine and its salts can not readily be extracted in aqueous solution because of their insolubility in most aqueous solvents. Experimental results with a variety of solvents are reported.—J. Ind. & Eng. Chem. 1914, v. 6, p. 931–933.

von Braun, J.: Examination of the morphine alkaloids. The chemical formula of morphine, codeine, and thebaine, with a report of some experiments.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 2312–2330.

Einbreck, Hans: Progress in the chemistry of the morphine alkaloids.—Fortschr. Chem. 1914, v. 9, p. 193.

Gaell and Marschalké: The quantitative determination of several opium alkaloids, on the basis of their conversion into their methyloxyl group.—Ztschr. Anal. Chem. 1914, v. 53, p. 673–678.

Gordin and Kaplan: Notes on the estimation of morphine and on Lloyd's reagent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1636–1658; also Merck's Rep. 1914, v. 23, p. 295–296, and Am. J. Pharm. 1914, v. 86, p. 461–464.

Fernau, Albert: The Ph. Austr. should include the color reaction, with solution of formaldehyde and sulphuric acid.—Ztschr. Allgem. österr. Apoth.-Ztg. 1914, v. 52, p. 563.

Oliver, T. H.: The copper test for morphine was first suggested by Denigès about 1910.—Lancet, 1914, v. 187, p. 423; also Drug Topics, 1914, v. 29, p. 132.

Williams, J. B.: The estimation of morphine in pills and tablets.—Am. J. Pharm. 1914, v. 86, p. 308–312.

Brown, Linwood, A.: The determination of morphine in tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 642–643. See also Kebler, L. F., p. 1093.

Finneran, J. F.: Examination of samples of tablets of one-sixth grain morphine showed that the tablets contained one-fourth grain.—Proc. Maine Pharm. Assoc. 1914, p. 43.

Deussen, Ernst: The sterilization of solutions of morphine, the changes produced and the need for using boiled recently distilled water.—Münch. med. Wchnschr. 1914, v. 61, p. 2339–2340. See also Pharm. Post, 1914, v. 47, p. 93.

Grimbert and Leclére: The determination of oxy-morphine in presence of morphine.—J. pharm. et chim. 1914, v. 10, p. 425–428.

Aloy and Rabaut: The characterization of morphine and of phenols by means of the salts of uranium.—Bull. Soc. chim. France, 1914, v. 15, p. 680–682.

Jackson, D. E.: A note on the pharmacological action of opium alkaloids.—J. Pharmacol. & Exper. Pherap. 1914, v. 6, p. 57–72.

Meissner, R.: A reply to Straub's remarks on the work relating to the influence of morphine action on the secondary alkaloids of opium.—Biochem. Ztschr. 1914, v. 67, p. 502–503.

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Bertrand, Gabriel: On the use in obstetrics and in surgery of large doses of morphine as an analgesic.—Bull. sc. pharmacol. 1914, v. 21, p. 497–501.

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Editorial: The use of twilight sleep in obstetrics. Unbiased opinion seems to be that the routine use of scopolamine-morphine injection in general medical work would increase the dangers to both the mother and child.—Hahnemann. Month. 1014, v. 49, p. 946–947.

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Wolff, Herbert: A study of the synergism existing between morphine, urethane, and other narcotics.—Arch. exper. Path. u. Pharmakol. 1914, v. 74, p. 298–310.

Delava, Paul: An experimental study of the ocular compression effects after the administration of morphine and other drugs.—Compt. rend. Soc. biol. 1914, v. 76, p. 631–632.

Reach, Felix: A contribution on chronic morphine action.—Ztschr. exper. Path. u. Therap. 1914, v. 16, p. 321–326.

Anderson, W. K.: Morphinomania. Report of a case of two years' standing.—Practitioner, 1914, v. 92, p. 440–443.

Valenti, Adriano: Experimental observations on chronic morphinism.—Arch. exper. Path. u. Pharmakol. 1914, v. 75, p, 437–462.

König, H.: The prognosis of morphinism. A review of the varied courses that disease may take.—Berl. klin. Wchnschr. 1914, v. 51, p. 1061–1064.

Mignot and Usse: Mental disturbances observed in subjects addicted to the use of morphine and to the use of chloral.—(L'Encéphale, 1913, March) Nouv. remèdes, 1914, v. 31, p. 96.

Valenti, Adriano: On the elimination of morphine in the gastrointestinal tract. Report of experimental work.—Arch. farmacol. sper. 1914, v. 17, p. 248–262.

Czapek and Wassermann: Acute suppression of urine, an infrequently noticed action of morphine.—Deutsch. med. Wchnschr. 1914, v. 40, p. 1567–1569.

van Rijn, W.: Fatal case of morphine poisoning and a report of chemical, physical, and physiological detection of morphine.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 762–767.

Jolliffe, R. C.: Death of a foal 2 days old following hypodermic administration of one-half grain morphine. It is said to be practically impossible to kill an adult horse with morphine.—Am. Vet. Rev. 1914, v. 45, p. 465–467.

Anon.: The protocol of the International Opium Convention, including a list of the countries that have signified adherence to the provisions of the protocol.—Rev. Internat. Pharm. Brux. 1914, v. 2, p. 4–7.

Anon.: A list of the alkaloids, derivatives, and preparations for which official order blanks will be required in New York under the Boylan law.—Drug. Topics, 1914, v. 29, p. 104–105.

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MORPHINÆ HYDROCHLORIDUM.

Kollo, Konstantin: Ampoules of morphine hydrochloride may be Tyndallized at 100° for one-half hour.—Südd. Apoth.-Ztg. 1914, v. 54, p. 70.

MORPHINÆ SULPHAS.

Brown, L. A.: A total of 13 samples of tablets of morphine sulphate were analyzed; 5 passed and 8 adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Todd, A. R.: Of 12 samples of tablet triturates of morphine sulphate examined 1 was found to be adulterated.—Rep. Michigan D. & F. Com. 1914, p. 176.

MOSCHUS.

U. S. P. IX: Known in commerce as Tonquin or Tibetan musk. Description somewhat elaborated. Musk, when dried to constant weight in a desiccator over sulphuric acid, should not lose more than 15 per cent of moisture.—J. Am. Pharm. Assoc. 1914, v. 3, p. 391, and Abstr. Prop. Changes, Part 2, 1914, p. 33.

Hayes, Benjamin A.: The origin of Tonquin musk and its uses in perfumery.—Pract. Drug. 1914, v. 32, p. 557.

Tunmann, O.: Musk is imported directly into Hamburg from Shanghai, only negligible quantities coming by way of England.—Apoth.-Ztg. 1914, v. 29, p. 101.

Roure-Bertrand Fils: A table showing the statistics of exports of musk since 1908.—Sc. & Ind. Bull. April, 1914, p. 66. See also Schimmel & Co.: Semi-Ann. Rep. April, 1914, p. 106, and Gehe & Co.: Handelsbericht, 1914, p. 95.

Anon.: Musk, although largely used for other purposes, is now seldom prescribed as a medicine.—Lancet, 1914, v. 187, p. 907.

MYRISTICA.

U. S. P. IX: Description elaborated. Broken and wormy kernels should be rejected. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 391, and Abstr. Prop. Changes, Part 2, 1914, p. 33.

Anon.: Nutmegs and mace, their history, botany, and cultivation. Illustrated by plantation photographs.—Chem. & Drug. 1914, v. 84, p. 160–162. See also p. 392.

Maines, E. L.: Nutmeg was found to contain from 1.83 to 2.63 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Rippetoe, J. R.: One sample of nutmeg was found to contain 14.35 per cent of alcohol extract and 2 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 441.

J. D. Riedel, A.-G.: Myristica contained from 2.3 to 3.3 per cent of ash and from 37.2 to 41.2 per cent of extract soluble in ether.—Riedel's Berichte, 1914, p. 33.

Hortvet, Julius: Of 10 samples of nutmeg examined, 4 were reported illegal.—Rep. Minnesota D. & F. Com. 1914, p. 68.

Anon.: Two cases of severe, not fatal, poisoning in young women from the ingestion of an infusion of nutmeg.—Südd. Apoth.-Ztg. 1914, v. 54, p. 347.

MYRRHA.

U. S. P. IX: A gum resin obtained from one or more species of *Commiphora.* Powder described in detail. Not less than 35 per cent of myrhh should be soluble in alcohol. Ash not exceeding 8.5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 392, and Abstr. Prop. Changes, Part 2, 1914, p. 34.

Caesar & Loretz: The determination of resin content of resins and gum resins.—Jahres-Ber. 1914, p. 87–88.

Baker, W. L.: The ash content of Po. Gum. Myrrh was found to be high, 15 per cent.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 210.

Maines, E. L.: Myrrh gum was found to contain from 4.08 to 5.45 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

E'we, G. E.: Three lots of powdered myrrh tested 27.7, 33.2, and 36.2 per cent, respectively, of alcohol-soluble matter. Two of the lots gave ash yields of 28.5 and 8 per cent, respectively.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Rippetoe, J. R.: Three sampes of myrrh were found to contain from 10.99 to 26 per cent of alcohol extract and from 7.70 to 11.28 per cent of ash. One sample was of poor quality.—Am. J. Pharm. 1914, v. 86, p. 441.

Mann, E. W.: The ash yield from three samples of powdered myrrh ranged from 3.37 to 4.74 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 18.

Linke, H.: Six samples of myrrh gave from 2.50 to 4.8 per cent of ash.—Apoth.-Ztg. 1914, v. 29, p. 567.

Lefeldt, M.: The Ph. Germ. V should include a requirement for alcohol soluble constituents in tincture of myrrh.—Pharm. Ztg. 1914, v. 59, p. 43.

NAPHTHALENUM.

Storp, W.: On the combustibility of naphthalene.—Pharm. Ztg. 1914, v. 59, p. 653–654.

Fronsac, Lucien: The determination of naphthalene in the control and purification of illuminating gas.—Rev. gén. chim. 1914, v. 17, p. 4–8.

Bacot, A. W.: Naphthalene for the destruction of mosquitoes in covered cisterns and wells, with tabulated summary of results.—Brit. M. J. 1914, v. 2, p. 15.

Collins and Hall: The use of coal tar, creosote, and naphthalene for preserving wooden fences.—J. Soc. Chem. Ind. 1914, v. 33, p. 466–468.

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NITROUS OXIDE.

U. S. P. IX: Nitrous oxide (N_2O). A colorless gas, possessing a slight characteristic odor and a somewhat sweetish taste. Tests for carbon dioxide, halogens, acids or bases, and reduced substances are added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1572–1573, and Abstr. Prop. Changes, Part 6, 1914, p. 10–11.

Torley and Matter: Process for the manufacture of nitrous oxide. U. S. Patent 1,098,305, May 26, 1914.—J. Soc. Chem. Ind. 1914, v. 33, p. 750.

Coburn, R. C.: Sterilization of apparatus for nitrous oxide-oxygen anesthesia.—J. Am. M. Assoc. 1914, v. 63, p. 1596.

Moorhead, S. W.: An illustrated description of a portable nitrous oxide-oxygen apparatus.—J. Am. M. Assoc. 1914, v. 62, p. 1326. See also Miller, Albert H.: v. 63, p. 1474–1475.

Guy, G.: For prolonged dental operations nitrous oxide and ether, in mixture or sequence, is of proved value.—Dental Cosmos, 1914, v. 56, p. 1295. See also p. 1296, and Macfarlane, W. I.: Dental Digest, 1914, v. 20, p. 16–19.

Frederick, H. B.: Nitrous oxide and oxygen anesthesia.—Electic M. J. 1914, v. 74, p. 580–581.

Miller, R. P.: We have as yet found no ideal anesthetic toward which we are striving, but we have in nitrous oxide and oxygen the safest and best anesthetic known to-day.—J. Am. Inst. Homœop. 1914, v. 6, p. 733–736.

Dolley, David H.: A note on nitrous oxide as an anesthetic in animal experimentation.—J. Exper. M. 1914, v. 19, p. 372–375.

For additional references see Index Med.; Zentralbl. exper. Med.; J. Am. M. Assoc.; Chem. Abstr.; and Chem. Zentralbl.

NUX VOMICA.

U. S. P. IX: Description elaborated. Color test for potassium dichromate and sulphuric acid omitted. Ash not exceeding 3.5 per cent. To require not less than 2.5 per cent of the total alkaloids of nux vomica.—J. Am. Pharm. Assoc. 1914, v. 3, p. 392, 994, and Abstr. Prop. Changes, Part 2, 1914, p. 34, Part 4, p. 11.

Mann, E. W.: Nux vomica, in the Ph. Brit. V, is required to contain a minimum of 1.25 per cent of strychnine. A sample of powder drawn from a considerable bulk and assayed by the official method yielded 1.34 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 18.

Lloyd, John Uri: Characteristics and constituents of nux vomica.—Eclectic M. J. 1914, v. 74, p. 227.

Editorial: The scarcity of nux vomica. Review of the recent fluctuation in the price of the drug.—Pharm. J. 1914, p. 842–843.

Baker, W. L.: In a sample of nux vomica, the physical appearance of the seeds was poor; strychnine content 1.222 per cent.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

Gehe & Co.: A new variety of nux vomica is being brought into the market by way of Burma. The seeds externally are light gray and internally yellow. They are devoid of strychnine. The origin of this false nux vomica has as yet not been discovered.—Handelsbericht, 1914, p. 119.

Weinstein, Joseph: Nux vomica is hard to find that will assay U. S. P. amount of alkaloid.—Proc. New York Pharm. Assoc. 1914, p. 114.

Wassicky, R.: The microchemical detection of strychnine and brucine in the seeds of strychnos nux vomica.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 35, 42, 53, 67.

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Editorial: Recent shipments of oil of anise were found to be practically free from leaf oil and to have a congealing point as high as 16.5 and melting point 18.5 or thereabouts.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 130.

Anon.: Observations on the differentiation between the fruits of *Illicium anisatum* Lour and *Illicium religosum* Sieb.—Pharm. Zentralh. 1914, v. 55, p. 187.

Noyes, C. R.: Oil of anise as it appears on the market is very crude and is exported in a lead-lined copper container in which it absorbs a considerable quantity of lead and copper. The pure oil may be procured at a not much higher price, but it will never be supplied unless its purity is insisted upon.—J. Am. Pharm. Assoc. 1914, v. 3, p. 855; also Proc. Minnesota Pharm. Assoc. 1914, p. 192.

Editorial: There is a wide range of difference between the congealing and melting points of the oils of star anise of commerce at the present time.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 73.

Schimmel & Co.: It is reported that samples of oil of star anise are on the market which, while possessing the normal solubility, are partly abnormal in respect to their other properties and appear to be adulterated. Adulteration probably consists in the addition of fatty oil or mineral oils.—Semi-Ann. Rep. April, 1914, p. 93.

Finneran, J. F.: At the present time it is impossible to buy in Massachusetts or from any of the New York importers who sell essential oils U. S. P. oil of anise.—Proc. Maine Pharm. Assoc. 1914, p. 42.

Patch, E. L.: Lots of oil of anise answered all tests but that of optical rotation. The optical rotation varied from −3° to +9.05°; congealing point of three samples from 6° to 15.5°; specific gravity of two samples 0.9796 and 0.9768, respectively.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1288.

Albright, Alan R.: The hydrogen number of imitation anise oil was found to be 125.1; the per cent of active constituent 82.4; the theoretical per cent of active constituent 80 per cent. The hydrogen number of anethol was found to be 150.5.—J. Am. Chem. Soc. 1914, v. 36, p. 2202.

Editorial: An oil of anise congealing at over 15° would be considered as complying with the Ph. Brit. V requirements.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 398.

Mann, E. W.: Dextro-rotatory oil is now granted official recognition, a necessary change since we usually find that more than one-half of the genuine samples examined possess a slight dextro-rotation.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 27.

Roberts, J. G.: All of the samples of oil of anise examined were of U. S. P. quality. They all contained a trace of lead, but the amount found in one of them was so small that it was considered negligible.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 148.

E'we, G. E.: One lot of oil of anise had a specific gravity of 0.980, optical rotation of −0.5°, and was strictly U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Congdon, Leon A.: Three samples of oil of anise; two not standard.—Rep. Kansas Bd. Health, 1914, p. 100. See also Sayre, L. E.: Bull. Kansas Bd. Health, 1914, v. 10, p. 24.

U. S. P. IX: To direct the use of recently boiled distilled water for anise water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 525, and Abstr. Prop. Changes, Part 3, 1914, p. 2.

Lythgoe, Hermann C.: Of 67 samples of spirit of anise examined, 15 were found to be adulterated and 52 genuine.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 410.

Morin, E.: The iodine number of oil of anise may be used as a basis for determining the oil content of spirit of anise.—Ann. chim. anal. 1914, v. 20, p. 49–52.

Editorial: Manufacturing confectioners are still being supplied with most grossly adulterated star anise oil.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 278.

For additional references on anise oil see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.

OLEUM AURANTII CORTICIS.

U. S. P. IX: Obtained by expression from the fresh peel of *Citrus aurantium sinensis* Gallesio and its varieties. Refractive index 1.4723 to 1.4737 at 20°. Dextrogyrate not less than 94°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1106, and Abstr. Prop. Changes, Part 5, 1914, p. 7.

Roure-Bertrand Fils: Tables showing the production and destination of Messina oranges during the years 1911, 1912, and 1913.—Sc. & Ind. Bull. April, 1914, p. 50.

Pattinson, J. W.: The orange-oil industry in Jamaica.—J. Jamaica Agric. Soc. 1914, v. 18, p. 113–115. See also Chem. & Drug. 1914, v. 85, p. 76, and Drug. Circ. 1914, v. 57, p. 665.

Patch, E. L.: Reports the specific gravity of oil of orange as 0.8458; optical rotation +89.5 (U. S. P. not below +95°).—J. Am. Pharm. Assoc. 1914, v. 3, p. 1289.

E'we, G. E.: Of five lots of oil of orange examined, all were strictly U. S. P., having optical rotations ranging from 95.3 to 97.2°.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 150.

Jensen, H. R.: Of four samples of orange oil, two were adulterated and had the odor and characters of added lemon terpenes and turpentine.—Evans' An. Notes, 1914, p. 49.

Mann, E. W.: Several samples representing both the bitter and sweet oils have given results falling within the usually accepted limits.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 36.

OLEUM AURANTII AMARI CORTICIS.

Beringer, George M.: A proposed N. F. monograph for Oleum Aurantii Amari Corticis, oil of bitter orange peel. A volatile oil obtained by expression from the fresh peel of the bitter orange, *Citrus aurantium* Linné *subspecies amara* Linné. It should be kept in small amber-colored, well-stoppered bottles in a cool place. Oil that has developed a terebinthinate odor should not be dispensed.—J. Am. Pharm. Assoc. 1914, v. 3, p. 875.

OLEUM AURANTIUM FLORUM.

Beringer, George M.: A proposed monograph for Oleum Aurantii Florum, oil of orange flowers; oil of neroli. A volatile oil distilled from the fresh flowers of the bitter orange, *Citrus aurantium* Linné *subspecies amara* Linné (*Citrus vulgaris* Risso, *Citrus Bigaradia* Risso). It should be kept in small amber-colored, well-stoppered bottles in a cool place protected from light.—J. Am. Pharm. Assoc. 1914, v. 3, p. 875.

OLEUM BERGAMOTTÆ.

Beringer, George M.: A proposed N. F. monograph for Oleum Bergamottæ, oil of bergamot. A volatile oil obtained by expression from the rind of the fresh fruit of *Citrus bergamia* Risso. It should be kept in small amber-colored bottles in a cool place, protected from light.—J. Am. Pharm. Assoc. 1914, v. 3, p. 876.

Roure-Bertrand Fils: Tables showing the production and destination of Messina oil of bergamot during the years 1911, 1912, and 1913.—Sc. & Ind. Bull. April, 1914, p. 51.

Jensen, H. R.: Seven samples of bergamot oil ranged from 0.8825 to 0.8855 specific gravity; refractive index, 1.465 to 1.4662; optical rotation, 8.26° to 17.50°; saponification value, 180.3 to 203.7.—Evans' An. Notes, 1914, p. 13.

Mann, E. W.: The refined methods of adulteration now employed render it necessary to make a very long and complete analytical examination to insure the purity of oil of bergamot.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 28.

Richter, Ernst: A sample of oil of bergamot was found to be turbid.—Apoth.-Ztg. 1914, v. 29, p. 211.

OLEUM BETULÆ.

U. S. P. IX: General article under methyl salicylate to replace the present U. S. P. VIII text for the oil of sweet birch, oil of gaultheria, and methyl salicylate, includes the requirement that the source from which the product is derived in every case must be stated on the label.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1104, and Abstr. Prop. Changes, Part 5, 1914, p. 5.

Watson and Sayre: Oil of birch and methyl salicylate. Some new color reactions for the differentiation of oil of wintergreen.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1658–1659.

Schimmel & Co.: Control tests of oils generally confirm the statements made by the Bureau of Chemistry of the United States Department of Agriculture regarding the color reaction of oil of wintergreen, oil of sweet birch, and methyl salicylate, except that betula oil at first gave a decidedly paler color than did gaultheria oil.—

Semi-Ann. Rep. 1914, April, p. 98–99. See also Murray, B. L.: Oil, Paint, and Drug Rep. 1914, v. 86, September 30, p. 34.

Anon.: A wintergreen mill. An illustrated description of a plant for making oil of birch.—Spatula, 1914, v. 20, p. 217–218.

E'we, G. E.: All lots of oil of sweet birch examined were optically inactive. One was orange color instead of the usual yellowish white.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 151.

OLEUM CADINUM.

U. S. P. IX: Specific gravity 0.980 to 1.055 at 25°. Completely soluble in 3 volumes of ether, amyl alcohol, chloroform, glacial acetic acid, or oil of turpentine, but only partly soluble in petroleum benzine.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1106, and Abstr. Prop. Changes, Part 5, 1914, p. 7.

E'we, G. E.: The three samples of oil of cade tested were completely soluble in alcohol and not completely soluble in ether, but answered all other U. S. P. requirements. The U. S. P. requires exactly the reverse as regards alcohol and ether solubilities.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 148.

Jensen, H. R.: One sample examined of a type frequent in commerce was obviously derived from conifers other than *Juniper oxycedrus.* The acetic-acid content by water extraction reached 0.6 per cent.—Evans's An. Notes, 1914, p. 15.

Anon.: The wood of the cade, *Juniperus oxycedrus*, yields from 1.6 to 3 per cent of essential oil, which can be used as a substitute for oil of cade in dermatology.—Pharm. Era, 1914, v. 47, p. 555.

OLEUM CAJUPUTI.

U. S. P. IX: Distilled from the fresh leaves and twigs of several varieties of *Melaleuca leucadendron* Linné. The oil is to be colorless or yellowish. Specific gravity, from 0.912 to 0.925 at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1106, and Abstr. Prop. Changes, Part 5, 1914, p. 7.

Schimmel & Co.: The largest quantities of the oil of cajuput go to the United States, where the oil is used in the manufacture of a few well-established patent medicines.—Semi-Ann. Rep. April, 1914. p. 33.

Dodge, Francis D.: A further note on the determination of cineol. The phosphoric acid and the resorcinol processes are of little use in the presence of camphor or terpineol. The permanganate method as described is not satisfactory for oils containing less than 50 per cent of cineol.—J. Ind. & Eng. Chem. 1914, v. 6, p. 863–864.

Jensen, H. R.: Twenty-seven samples of oil of cajuput, all genuine, with one exception, which gave: Specific gravity, 0.902; refractive index, 1.465; optical rotation, —2.40°; cineol, 45 per cent.—Evans' An. Notes, 1914, p. 15.

Mann, E. W.: with 1 exception, the whole of the 11 samples of oil of cajuput tested accorded with the constants laid down in the Ph. Brit. V. Specific gravity of this oil was but 0.9135 and cineol content low, viz, 48 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 29.

Schimmel & Co.: A slight copper content is almost characteristic of crude cajuput oil.—Semi-Ann. Rep. April, 1914, p. 33.

OLEUM CARI.

U. S. P. IX.: Yielding not less than 50 per cent by volume of carvone, soluble in 8 volumes of 80 per cent alcohol. Assay for carvone added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1106, and Abstr. Prop. Changes, Part 5, 1914, p. 7.

Editorial: Last year's Dutch crop of caraway oil was unprecedented for poor quality, the percentage of oil yielded being below any previous record.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 39. See also Schimmel & Co.: Semi-Ann. Rep. April, 1914, p. 42.

Mann, E. W.: The lower limit for specific gravity official for oil of caraway is, in our opinion, too high; otherwise all samples examined conform substantially to the Ph. Brit. tests.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 29.

OLEUM CAROPHYLLI.

U. S. P. IX: Rubric to read 82 per cent of eugenol. Specific gravity from 1.038 to 1.060 at 25°. Optical rotation slightly levogyrate not exceeding 1° 10′ in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1107, and Abstr. Prop. Changes, Part 5, 1914, p. 8.

Umney, J. C.: Analytical processes of the Ph. Brit. V. for the analysis of clove oil.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 409; also J. Soc. Chem. Ind. 1914, v. 33, p. 1222.

Albright, R. A.: The hydrogen number of commercial clove oil was found to vary from 113.2 to 113.3; the per cent of active constituent from 83.8 to 83.3.—J. Am. Chem. Soc. 1914, v. 36, p. 2202.

Orrick, W. H.: Of eight lots of oil of cloves examined all contained the proper amount of eugenol, ranging from 80 to 83 per cent, and were otherwise strictly U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 148.

Jensen, H. R.: Sixteen samples of genuine clove oils had: Specific gravity, 1.052 to 1.063; refractive index, 1.5314 to 1.5357; optical rotation, —0.40° to 0°; phenols, 88 to 96 per cent; soluble in 70 per cent alcohol 1 to 1½ volumes.—Evans's An. Notes, 1914, p. 26.

Mann, E. W.: Results obtained by the examination of 16 samples, all of which were considered to be of satisfactory quality were: Specific gravity, 1.046 to 1.056; rotation, —0.50° to —0.85°; refractive index, 1.5242 to 1.5339; eugenol, from 83 to 92 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 32.

Cochran and Perkins: As a preservative of starch sirups 0.04 per cent of sassafras or clove, or cassia is better preservative than 0.08 per cent of juniper berry.—J. Ind. & Eng. Chem. 1914, v. 6, p. 306.

Weinland and Neff: The iron combinations of the phenols. Combinations of eugenol and of vanillin with iron.—Arch. Pharm. 1914, v. 252, p. 600–608.

OIL, CHAULMOOGRA.

Francis, E.: The true chaulmoogra oil is obtained from *Taraktogenos kursii.* This oil is sometimes substituted by an oil obtained from the seeds of *Hydnocarpus wightiana*, a tree of the same family growing in Malabar.—Répert. pharm. 1914, v. 26, p. 198–199. See also Francis, Ernest E.: Lancet, 1914, v. 186, p. 718.

Jensen, H. R.: Owing to the very close overlapping of the chemical and physical values of chaulmoogra oil, it is scarcely practicable at present to differentiate between the oils.—Evans' an. Notes, 1914, p. 22.

Heiser, Victor G.: The chaulmoogra oil treatment of leprosy, an outline of the method employed.—Rep. Philippine Islands Bur. Health, 1914, p. 94–95. See also Public Health Rep. 1914, v. 29, p. 21–22.

OLEUM CHENOPODII.

U. S. P. IX: Distilled from *Chenopodium ambrosioides anthelminticum* Linné. Specific gravity, 0.955 to 0.980 at 25°. Optical rotation levogyrate varying between —4° and —10° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1107, and Abstr. Prop. Changes, Part 5, 1914, p. 8.

Henkel, Alice: An illustrated description of *Chenopodium anthelminticum* L.—Phys. Drug News, 1914, v. 9, p. 121; also Spatula, 1914, v. 20, p. 285.

Rabak, Frank: The physical properties of oil of chenopodium obtained during successive seasons from 1907 to 1910 easily fall within the requirements prescribed by the Pharmacopœia.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1673.

Mann, E. W.: Very little change is found in the constants observed from time to time.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 41.

Kobert, R.: Two saponin bodies have been discovered in the herb and seeds of *Chenopodium ambrosioides*, as well as in other plants belonging to the N. O. *Chenopodiaceæ.*—Semi-Ann. Rep. April, 1914, p. 100.

Goester, L. E.: *Chenopodium ambrosoides* Linn. is a widely distributed weed in South Africa.—Pharm. Weekblad, 1914, v. 51, p. 1111.

Motter, Murray Galt: The use of oil of chenopodium in the treatment of hookworm disease.—Public Health Rep. 1914, v. 29, p. 2651–2653; also Montreal Pharm. J. 1914, v. 25, p. 236–237, and J. Am. M. Assoc. 1914, v. 63, p. 1875.

Levy, Robert L.: Oil of chenopodium in the treatment of hookworm infections.—Report of several cases.—J. Am. M. Assoc. 1914, v. 63, p. 1946–1949.

Schimmel & Co.: In Europe the excellent medicinal qualities of American worm seed oil are continually causing an extension of the demand and we are of opinion that the future of the article is full of promise.—Semi-Ann. Rep. 1914, April, p. 99.

OLEUM CINNAMOMI.

U. S. P. IX: Distilled from the young twigs of *Cinnamomum cassia* rectified by steam distillation. Rubric to require 80 per cent of cinnamic aldehyde. Specific gravity from 1.045 to 1.063 at 25°. Optical rotation varies from +1 to −1° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1107, and Abstr. Prop. Changes, Part 5, 1914, p. 8.

Noyes, C. R.: The commercial oil of cassia frequently contains lead and copper. The pure oil may be had for a not much higher price and it may never be had unless it is insisted upon.—Proc. Minnesota Pharm. Assoc. 1914, p. 192; also J. Am. Pharm. Assoc. 1914, v. 3, p. 855.

Schimmel & Co.: Efforts to discover cassia oil that is free from colophony meet with great difficulty. The suppliers are only willing to guarantee a definite aldehyde content.—Semi-Ann. Rep. April, 1914, p. 42.

Congdon, Leon A.: Three samples of oil of cassia; one not standard.—Rep. Kansas Bd. Health, 1914, p. 100. See also Sayre, L. E.: Bull. Kansas Bd. Health, 1914, v. 10, p. 24.

E'we, G. E.: One lot of oil of cassia examined assayed 90 per cent of cinnamic aldehyde, had a specific gravity of 1.050 and was otherwise strictly U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 148.

Jensen, H. R.: Eleven samples of cassia oil gave: Specific gravity, 1.061 to 1.0685; refractive index, 1.5972 to 1.6047; optical rotation, +4.25° to +6.35°; cinnamic aldehyde per cent, 77 to 84; acid value, 7.9 to 27.3.—Evans' An. Notes, 1914, p. 18.

Mann, E. W.: Satisfactory aldehyde percentages characterized both samples of oil of cassia tested. Specific gravity was 1.0585 and 1.063, respectively; cinnamic aldehyde, 79 and 81 per cent; refractive index, 1.5985 and 1.5992.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 30.

Rupe, Steiger and Riedler: Several derivatives of cinnamic acid. A report on experimental work.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 63–75.

Phillips, H. Adie: The stability of cinnamic aldehyde, with report of experimental observations.—Pharm. J. 1914, v. 93, p. 129–130; also Year-Book of Pharmacy, 1914, p. 371–374, and Perf. & Ess. Oil Rec. 1914, v. 322–323.

Umney, J. C.: Cinnamic aldehyde occurs in the oils of cinnamon and cassia, and is not produced on a large scale synthetically.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 17.

Alsberg, C. L.: Imitation extracts of cinnamon should be plainly labeled to show that they are imitation extracts.—S. R. A.-Chem. 1914, p. 114.

U. S. P. IX: To direct the use of recently boiled distilled water in making cinnamon water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 525, and Abstr. Prop. Changes, Part 3, 1914, p. 2.

Serger, H.: Review of some of the recent literature relating to the use of cinnamic aldehyde and related compounds as chemical preservatives.—Chem.-Ztg. 1914, v. 38, p. 354.

Cochran and Perkins: As a preservative of starch sirup, 0.04 per cent of oil of sassifras or clove or cassia is more efficient than 0.08 per cent of oil of juniper berry.—J. Ind. & Eng. Chem. 1914, v. 6, p. 306.

News Note: Cinnamic aldehyde in the form of oil of cinnamon is reported as being in current use by school children in Lima, Ohio. as an intoxicant.—N. A. R. D. Notes, 1914, v. 19, p. 176.

Oil of Ceylon cinnamon.—Mann, E. W.: The Ph. Brit. authorities have apparently accepted the views of some English distillers with regard to the proportion of cinnamic aldehyde characteristic of the true cinnamon bark oil. Samples examined during the two years have been very diverse in character. Specific gravity is found to vary from 0.950 to 1.044; the cinnamic aldehyde from — to 90 per cent; the refractive index from 1.5226 to 1.5079.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 30–31.

Jensen, H. R.: Twenty-seven samples of true cinnamon bark oil had: Specific gravity, 1.024 to 1.0335; refractive index, 1.5805 to 1.5927; cinnamic aldehyde, 69 to 80 per cent; soluble 70 per cent alcohol, 2 to 4 volumes. One sample contained 25 per cent phenols and was rejected as containing about 20 per cent leaf oil.—Evans' An. Notes, 1914, p. 24.

Dück: One sample of oil of cinnamon had a specific gravity of 1.034 and contained only 58.1 per cent of cinnamic aldehyde.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 235.

News Note: A sample of oil labeled oil of cinnamon, Ceylon, was on examination found to be oil of cinnamon leaf.—Pharm. Era, 1914, v. 47, p. 580.

Editorial: In chemical and physical characters, oil of Seychelles cinnamon leaf differs very little from the Ceylon oil.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 130.

OLEUM COPAIBÆ.

Semmler and Jakubowicz: Contribution to our knowledge of volatile oils and the separation and properties of East Indian oil of copaiba and of the sesquiterpene gurjunene and derivatives of the sesquiterpene.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 1141–1153.

E'we, G. E.: Two of the five samples of oil of copaiba examined were slightly low in specific gravity, each testing 0.893.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 149.

Mann, E. W.: In two batches of copaiba oil, which agreed very closely with the standards laid down in the Ph. Brit. V, the specific gravity was found to vary from 0.901 to 0.894; rotation from −14.0° to −25.5°; refractive index from — to 1.4950.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 32.

OLEUM CORIANDRI.

U. S. P. IX: Specific gravity from 0.863 to 0.875 at 25°. Optical rotation from +8 to +13° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1107, and Abstr. Prop. Changes, Part 5, 1914, p. 8.

Schimmel & Co.: Business in this formerly important product has fallen off greatly.—Semi-Ann. Rep. 1914, April, p. 49.

Mann, E. W.: Three samples of oil of coriander examined proved to possess normal characters. Specific gravity ranged from 0.879 to 0.880; rotation from +10.4° to +10.5°; refractive index from 1.4702 to 1.4725. All clearly soluble in 3 volumes of alcohol (70 per cent).—Ann. Rep. Southall Bros. & Barclay, 1914, p. 32.

Cochran and Perkins: As a preservative of starch sirups coriander is superior to sweet fennel, which in turn is superior to lavender and caraway.—J. Ind. & Eng. Chem. 1914, v. 6, p. 307.

OLEUM CUBEBÆ.

U. S. P. IX: Optical rotation to read from −20 to −40° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1107, and Abstr. Prop. Changes, Part 5, 1914, p. 8.

Maines and Gardner: In the manufacture of extract of cubeb the oil of cubeb can be obtained as a by-product by simply redistilling the exhausted drug.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1327.

Editorial: The boiling point of oil of cubeb. Report of Messrs. Oranje, of Amsterdam.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 372.

Brewis, E. Theodore: The difference in the character of oil of cubebs distilled from fresh or old cubeb. A requirement that 60 to 65 per cent of the oil should distill between 250 and 280° would probably be entirely satisfactory.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 256–257. See also p. 276.

Roberts, J. G.: The rejection of one lot of oil of cubeb was recommended because it had a low optical rotation, indicating the presence of false cubeb.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 148.

E'we, G. E.: Of two lots of oil of cubeb examined both had lower optical rotation than the U. S. P. limit of 25°, namely, —20.2° and —20°. Otherwise they were strictly U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 149.

Congdon, Leon A.: One sample of oil of cubeb; doubtful.—Rep. Kansas Bd. Health, 1914, p. 100.

Mann, E. W.: Two samples of normal oil of cubeb had a specific gravity of 0.924 and 0.915.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 32.

OLEUM ERIGERONTIS.

E'we, G. E.: One lot of oil of erigeron examined had a higher specific gravity than the U. S. P. limit of 0.865, namely, 0.870. The optical rotation was +58.5° and the sample was otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 149.

OLEUM EUCALYPTI.

U. S. P. IX: Distilled from the fresh leaves of *Eucalyptus globulus* Labillardière or from other species of Eucalyptus. Rubric to read not less than 70 per cent of eucalyptol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1107; and Abstr. Prop. Changes, Part 5, 1914, p. 8.

Noyes, C. R.: Oil of eucalyptus as ordinarily sold is the oil of *Eucalyptus amygdalina.* This contains very little eucalyptol and is comparatively valueless.—J. Am. Pharm. Assoc. 1914, v. 3, p. 854; also Proc. Minnesota Pharm. Assoc. 1914, p. 190.

Schimmel & Co.: The quality of newly arrived parcels of oil of eucalyptus is satisfactory throughout. These oils contain in part over 58 per cent of eucalyptol.—Semi-Ann. Rep. April, 1914, p. 61.

Turner and Holmes: Estimation of cineol in oil of eucalyptus. The method is based on the fact that arsenic acid forms with cineol an addition compound which is sufficiently stable for all practical purposes.—J. Am. Pharm. Assoc. 1915, v. 4, p. 351–358.

Dodge, Francis D.: A further note on the determination of cineol. The phosphoric acid and the resorcinol processes are of little use in the presence of camphor or terpineol. The permanganate method as described is not satisfactory for oils containing less than 50 per cent of cineol.—J. Ind. & Eng. Chem. 1914, v. 6, p. 863–864.

Harding, H. G. A.: Determination of the cineol content of eucalyptus oils. Outline of the modified resorcinol method.—Pharm. J. 1914, v. 93, p. 701.

E'we, G. E.: Of two lots of oil of eucalyptus examined, both were strictly U. S. P., having optical rotations of +3° and +1.3° and specific gravities of 0.919 and 0.915.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 149.

Jensen, H. R.: The cineol average for two years was 84.7 per cent for the Bosistos oil and 92.1 per cent for the Burnside oil.—Evans' An. Notes, 1914, p. 32.

Antony, H.: The use of oil of eucalyptus in perfumes and cosmetics, with a number of formulas for perfumes, soaps, and mouth washes.—Seifensieder Ztg. 1914, v. 41, p. 731–732.

Milner, I. N.: In my treatment of pneumonia oil of eucalyptus is in constant use.—Ellingwood's Therap. 1914, v. 8, p. 175–176.

OLEUM FŒNICULI.

U. S. P. IX: Optical rotation may vary from +12° to +24° in a 100 mm. tube at 25°. Congealing point not below 3°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1108, and Abstr. Prop. Changes, Part 5, 1914, p. 9.

Rabak, Frank: The physical properties of oil of fennel distilled during several successive seasons at Arlington vary somewhat from the requirements included in the Pharmacopœia.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1673.

Anon.: The congealing point of menthol and of oil of fennel is a more readily demonstrated factor than is the melting point. Menthol congeals at from 40° to 41° and oil of fennel at from 2° to 3°.—Südd. Apoth.-Ztg. 1914, v. 54, p. 272.

Albright, Alan R.: The hydrogen number of commercial fennel oil was found to be 101.3; the per cent of active constituent, 83.9.—J. Am. Chem. Soc. 1914, v. 36, p. 2202.

Patch, E. L.: Reports the specific gravity of oil of fennel as 0.9784 (U. S. P. 0.953 to 0.973); congealing point 0° (U. S. P. not below 5°); optical rotation +14.5°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1288.

Dück: A sample of oil of fennel had a specific gravity of 0.951 and was not completely soluble in 8 parts of 80 per cent alcohol.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 234.

Jensen, H. R.: Three genuine samples of fennel oil had: Specific gravity, 0.9715 to 0.975; refractive index, 1.5295 to 1.5305; optical rotation, +16.15° to +17°; soluble 90 per cent alcohol one-half volume.—Evans' An. Notes, 1914, p. 33.

Mann, E. W.: Three samples of oil of fennel had freezing points considerably below those characterizing the unsophisticated oil. Of nine samples examined, six were entirely satisfactory.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 33.

OLEUM GAULTHERIÆ.

U. S. P. IX: General article under methyl salicylate to replace the present U. S. P. VIII text for the oil of sweet birch, oil of gaultheria, and methyl salicylate, includes the requirement that the source from which the product is derived in every case must be stated on the label.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1104, and Abstr. Prop. Changes, Part 5, 1914, p. 5.

Noyes, C. R.: Frankly, I do not recommend the purchase of this oil, nor that of sweet birch. Use methyl salicylate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 854; also Proc. Minnesota Pharm. Assoc. 1914, p. 190.

Umney, J. C.: The natural oil is principally derived from the bark of the sweet birch, which grows in Canada and the northern United States.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 13.

Anon.: A wintergreen mill. An illustrated description of a plant for making oil of birch.—Spatula, 1914, v. 20, p. 217–218.

Watson and Sayre: Oil of birch and methyl salicylate. Some new color reactions for the differentiation of oil of wintergreen.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1658–1659.

Schimmel & Co.: Control tests of oils generally confirm the statements made by the Bureau of Chemistry of the United States Department of Agriculture regarding the color reaction of oil of wintergreen, oil of sweet birch, and methyl salicylate.—Semi-Ann. Rep. 1914, April, 98–99. See also Murray, B. L.: Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34, and Am. Druggist, 1914, v. 62, p. 365.

Editorial: Samples of oil of birch and oil of wintergreen distilled especially were found to vary considerably from by far the larger number of samples of the natural oil met with in commerce.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 130.

Rippetoe, J. R.: Two samples of wintergreen were found to contain 16.38 and 25.64 per cent of alcohol (70 per cent) extract and 2.44 and 2.74 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

Jensen, H. R.: Nine samples of wintergreen oil derived from white birch had: Specific gravity, 1.187 to 1.189; refractive index, 1.5362 to 1.537; optical rotation, 0° to ±0.5°; saponification value 369 to 374.5.—Evans' An. Notes, 1914, p. 70.

Strode, Sylvanus E.: Of two samples of oil of wintergreen examined, one was not passed.—Rep. Ohio D. & F. Div. 1914, p. 119.

Woods, Chas. D.: Of 25 samples of spirit of gaultheria, 13 were not within 10 per cent of official strength. The samples varied from 56 to 204 per cent of the official strength.—Off. Inst. Maine Agric. Exper. Sta. 1914, No. 61, p. 90.

Hortvet, Julius: Of 19 samples of extract of wintergreen examined, 11 were reported illegal. Rep. Minnesota D. & F. Com. 1914, p. 57.

Lythgoe, Hermann C.: Of 63 samples of spirit of wintergreen examined, 6 were found to be adulterated and 57 genuine.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 410.

OLEUM GOSSYPII SEMINIS.

Rather, J. B.: Utilization of the proteins of cotton seed by man.—J. Am. Chem. Soc. 1914, v. 36, p. 584–586. See also Wells, C. A.: J. Ind. & Eng. Chem. 1914, v. 6, p. 338–339.

Anon.: Cotton seed oil to the extent of 175,000,000 gallons was produced in the United States the past year.—Meyer Bros. Drug. 1914, v. 35, p. 358.

Editorial: Introductory to a series of articles treating on the subject of cotton seed products and their uses.—Oil, Paint & Drug Rep. 1914, v. 85, June 27, p. 10. See also v. 85, September 21, p. 36.

Palmer and Wright: Ethyl ester of linolic tetrabromide as a product in the analysis of cotton seed oil.—J. Ind. & Eng. Chem. 1914, v. 6, p. 822–823.

Gastaldi, Ernico: The modification suggested by Utz for the Halphen reaction for cotton seed oil.—Ann. chim. applicata, 1914, v. 2, p. 203–207.

Shaw, T. W. A.: The catalytic reduction of oleic acid and cotton seed oil by means of hydrogen in presence of finely divided nickel.—J. Soc. Chem. Ind. 1914, v. 33, p. 771–774.

Wingard, Ake: Autoöxidation and the changes in physical characteristics of fatty oils.—Svensk farm. Tidskr. 1914, v. 18, p. 265–270, 281–287.

Thoms, H.: A comparison of the physical and chemical properties of cotton seed oil and of hydrogenated cotton seed oil.—Arb. pharm. Inst. Univ. Berl. 1914, p. 145.

Mann, E. W.: Normal results were obtained for each of the four samples of cotton seed oil tested. Specific gravity ranged from 0.922 to 0.925; saponification value from 191.4 to 194.4; iodine value from 105.5 to 109.4; free fatty acid (as oleic) from 0.06 to 1.24 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 14.

OLEUM HEDEOMÆ.

U. S. P. IX: Distilled from the flowering plant of *Hedeoma pulegioides* Linné Persoon. Optical rotation to read from +17 to +28° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1108, and Abstr. Prop. Changes, Part 5, 1914, p. 9.

Jensen, H. R.: Eighteen genuine samples of pennyroyal oil were tested with the normal values: Specific gravity, 0.9355 to 0.9505; optical rotation, +14.45° to +22.30°.—Evans' An. Notes, 1914, p. 50.

Mann, E. W.: Specific gravity of two samples of oil of pennyroyal was 0.935 and 0.941; rotation, +21.0° and +18.75°; refractive index, 1.4836 and 1.4853.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 36.

OLEUM JUNIPERI.

U. S. P. IX: Distilled from the ripe fruit of *Juniperus communis* Linné. Specific gravity from 0.854 to 0.888. Optical rotation may vary from 0 to —15° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1108, and Abstr. Prop. Changes, Part 5, 1914, p. 9.

Henkel, Alice: An illustrated description of *Juniperus communis* L.—Phys. Drug News, 1914, v. 9, p. 120. See also Spatula, 1914, v. 20, p. 283, and Chem. & Drug. 1914, v. 84, p. 108.

Noyes, C. R.: Oil of juniper is generally sold in the form of imitations containing a variable amount of oil of turpentine or other cheap pine distillate.—Proc. Minnesota Pharm. Assoc. 1914, p. 192; also J. Am. Pharm. Assoc. 1914, v. 3, p. 855.

Editorial: Examination of a number of samples of old oil of juniper has furnished additional evidence of the changes occurring in this oil on keeping which make the framing of definite physical constants somewhat difficult.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 5–6.

E'we, G. E.: One lot of oil of juniper examined had a specific gravity of 0.8602 and was otherwise strictly U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 149.

Mann, E. W.: We have not met with any cases of adulteration in oil of juniper during the period under review; all samples have given results in conformity with the characters and tests of the Ph. Brit. V.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 34.

OLEUM LAVANDULÆ FLORUM.

U. S. P. IX: Distilled from the fresh flowering tops of *Lavandula vera* DeCandolle (*Lavandula officinalis* Chaix, *Lavandula spica* Linné). Specific gravity from 0.875 to 0.888 at 25°. Optical rotation may vary from —1 to —10° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1108, and Abstr. Prop. Changes, Part 5, 1914, p. 9.

Bristow-Noble, J. C.: Illustrated description of cultivation and harvesting of lavender.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 348–351.

Noyes, C. R.: Oil of lavender is generally sold in the form of imitations containing as much oil of turpentine or cheap pine distillate as is necessary to make the product fit the price.—J. Am. Pharm. Assoc. 1914, v. 3, p. 855; also Proc. Minnesota Pharm. Assoc. 1914, p. 192.

Rabak, Frank: Samples of oil of lavender distilled during several successive seasons at Arlington were found to be somewhat higher in specific gravity than the requirements of the Pharmacopœia.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1673.

Dodge, Francis D.: Examination of oil of lavender; the separation of foreign ester and the estimation of acetin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1667–1668.

Rupp, E.: Outline of method for determining the ether number of oil of lavender.—Apoth.-Ztg. 1914, v. 29, p. 724; also Südd. Apoth.-Ztg. 1914, v. 54, p. 322.

Editorial: Sample of oil of lavender distilled from the dried flowers was found to have an ester content of 61.6 per cent. The oil was decidedly sweet in odor and if produced in considerable quantities should bring a relatively high price.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 130.

Francois, J. G. R.: The solubility of oil of lavender. The contention that the proportion of 1 in 4 will not suffice for modern types of oil of lavender.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 147.

Hankey, William T.: Of 16 samples of oil of lavender examined 6 were rejected. The linalyl acetate content varied from 25.75 to 40.43 per cent.—Proc. Ohio Pharm. Assoc. 1914, p. 48.

Jensen, H. R.: Three samples of abnormal lavender oils (English) with good aroma, which may have been matured with alcohol, had: Specific gravity, 0.8795 to 08847; refractive index, 1.4647 to 1.4689; optical rotation, −9° to −9.5°; linalyl acetate, 8.8 to 9.5 per cent.—Evans' An. Notes, 1914, p. 41.

Mann, E. W.: The figures for 12 genuine foreign oils were: Specific gravity, 0.887 to 0.900; esters as linalyl acetate, 31.7 to 40.1 per cent; refractive index, 1.4617 to 1.4652.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 34.

OLEUM LIMONIS.

U. S. P. IX: Obtained by expression from the fresh, ripe peel of *Citrus medica* Linné, variety *Limonum* (Risso) Hooker filius. Refractive index, 1.4744 to 1.4755 at 20°. Optical rotation to read from +57 to +64° in a 100 mm. tube at 25°. Modified assay for citral.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1108, and Abstr. Prop. Changes, Part 5, 1914, p. 9.

Roure-Bertrand Fils: Tables showing the production and destination of Messina oil of lemon during the years 1911, 1912, and 1914.—Sc. & End. Bull. April, 1914, p. 51.

Editorial: The Ph. Brit. V, 4 per cent, minimum citral content for oil of lemon is questioned.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 397.

Marden and Elliott: In the determination of citral in lemon oil, it is better and more economical to use 50 per cent alcohol for the extraction and to dilute to the proper strength of alcohol later.—J. Ind. & Eng. Chem. 1914, v. 6, p. 930.

Böcker, E.: The citral determination of concentrated citral oils.—J. Prakt Chem. 1914, v. 90, p. 393–404.

Little, L. D.: A colorimetric method for the determination of citral in extracts of lemon and in oil of lemon.—J. Am. Pharm. Assoc. 1914, v. 3, p. 553–556; also Am. Perf. 1914, v. 9, p. 74–75.

Sachsse, E.: A new method of valuation of concentrated lemon oils.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 262–263.

Dodge, Francis D.: The detection of pinene in oil of lemon. A modified nitrosochloride method.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1664–1665.

Seaber, W. M.: Sample of artificially colored lemon oil. The oil was exceptionally brilliant in color, probably from the use of dimethyl-amido-azo-benzene (butter yellow).—Perf. & Ess. Oil Rec. 1914, v. 5, p. 43.

Roberts, J. G.: Two shipments of oil of lemon were received. One complied with all the requirements of the U. S. P., while the other had a low optical rotation.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 149.

Stockinger, O.: One lot of oil of lemon had a specific gravity of 0.850 and an optical rotation of +59°. It was otherwise U. S. P. The assay method is not satisfactory.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 149.

Editorial: Samples of Malaga lemon oil have recently arrived in London. The oil has a sweet and pleasant odor and flavor, not very similar to that of Messina lemon oil, and reminding one of a mixture of citrus peel oils.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 41.

Hankey, William T.: The citral content of six samples of oil of lemon varied from 4.22 to 5.2 per cent.—Proc. Ohio Pharm. Assoc. 1914, p. 48.

Jensen, H. R.: For 37 samples of lemon oil the figures were: Specific gravity, 0.855 to 0.860; refractive index, 1.4745 to 1.4763; optical rotation, +57.30° to +64°; citral, 4 to 5.35 per cent, 3.4 to 4.6 gms. in 100 cc.—Evans' An. Notes, 1914, p. 41.

Mann, E. W.: The Ph. Brit. V standard for citral is too high; 3.5 per cent would have been a far more reasonable and practicable minimum. Two samples examined yielded 2.62 and 1.10 per cent of citral, respectively.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 35.

OLEUM LINI.

Anon.: A review of market conditions in linseed oil.—Chem. & Drug. 1914, v. 85, p. 356. See also p. 850, v. 84, p.457–458; and Drugs, Oils & Paints, 1914, v. 29, p. 368–369.

Anon.: Standard specifications for the purity of raw linseed oil from North American seed. The properties, tests, and methods of testing.—J. Ind. & Eng. Chem. 1914, v. 6, p. 164.

Thurston, Azor: The testing of linseed oil for gloss oil. The U. S. P. saponification test for rosin products in linseed oil is too indefinite in case of adulteration with small quantities of rosin products which are more or less saponifiable.—J. Am. Pharm. Assoc. 1914, v. 3, p. 174–175.

Smith and Tuttle: The iodine number of linseed and petroleum oils. The results of experiments indicate that concordance is obtained only when a prescribed procedure is followed with exactness.—J. Washington Acad. 1914, v. 4, p. 316; also J. Ind. & Eng. Chem. 1914, v. 6, p. 994–998, and Oil, Paint & Drug Rep. 1914, v. 85, June 29, p. 34.

Pailler, E. C.: Analysis of linseed oil. A comparison of all the constants of linseed oil shown by four samples.—Chem. Eng. 1914, v. 19, p. 110–112.

Jensen, H. R.: Of the "raw" variety, 13 samples of linseed oil had: Specific gravity, 0.932 to 0.935; refractive index, 1.4821 to 1.484; saponification value, 189 to 197; iodine value, 170 to 184 (average 178).—Evans' An. Notes, 1914, p. 43. See also Mann, E. W.: Ann. Rep. Southall Bros. & Barclay, 1914, p. 17.

Frost, W. A.: Linseed oil manufactured by the so-called new process does not comply with the requirements of the Pharmacopœia.—Northwestern Druggist, June, 1914 ,v. 15, p. 23.

Bárány, F.: A rapid method for the determination of the unsaponifiable portion of linseed-oil varnish not volatile at 100°.—Ztschr. Anal. Chem. 1914, v. 53, p. 684–685.

Sayre, L. E.: The adulterants of linseed oil are now becoming so very adroit that it is difficult to detect them.—Bull. Kansas Bd. Health, 1914, v. 10, pfl 174.

Table showing some of the analytical results reported for linseed oil.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	27	11	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A	3	3	Proc. Kentucky Pharm. Assoc. 1914, p. 119.
Congdon, Leon A	24	17	Rep. Kansas Bd. Health, 1914, p. 100.
Hortvet, Julius	14	5	Rep. Minnesota D. & F. Com. 1914, p. 47.
Sayre, L. E	8	5	Bull. Kansas Bd. Health, 1914, v. 10, p. 27, 178.
Shannon, F. L	22	9	Rep. Michigan D. & F. Com. 1914, p. 118.
Shannon, F. L	15	8	Bull. Michigan D. & F. Dept. 1914; January-February, p. 10; March-April, p. 13; September-October, p. 12.
Strode, Sylvanus E	10	2	Rep. Ohio D. & F. Div. 1914, p. 122.

OLEUM MENTHÆ PIPERITÆ.

U. S. P. IX: Distilled from the flowering plant of Mentha piperita Linné, rectified by steam distillation. Levogyrate from —20° to —33° in a 100 mm. tube at 25°. Assay for esters and total menthol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1109, and Abstr. Prop. Changes, Part 5, 1914, p. 10.

Anon.: An illustrated description of the Kalamazoo (Mich.) peppermint fields.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 252–253.

Gattefossé, R. M.: The cultivation of English peppermint and the adoption of English methods of rectification have given new types of French oils that are in every way comparable to good English essences.—Perf. & Ess. Oil Rec. 1914, v. 6, p. 7.

Irk, Karl: The production of Japanese peppermint oil in various countries. A study of experimental results obtained in Germany and in other countries.—Pharm. Zentralh. 1914, v. 55, p. 459–462.

Schimmel & Co.: Table showing the production of peppermint oil and of menthol during the years 1909–1912, inclusive.—Semi-Ann. Rep. April, 1914, p. 79.

Anon.: A chart giving a graphic review of the fluctuation in the value of oil of peppermint during two decades from 1894 to 1913.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 142–143.

Rabak, Frank: The peppermint oils from four successive seasons were found to have a somewhat higher specific gravity than the upper limits of the Pharmacopœia.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1673.

Finneran, J. F.: At the present time it is impossible to buy in Massachusetts or from any of the New York importers who sell essential oils U. S. P. oil of peppermint.—Proc. Maine Pharm. Assoc. 1914, p. 42.

Mann, E. W.: The Ph. Brit. V now provides for total menthol and for esters, the minimum in the former case being 50 per cent and in the latter 5 per cent. All of the samples examined during the two years were in satisfactory agreement with these requirements.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 37.

Penniman and Randall: A rapid method for the determination of camphor and of certain essential oils when in solution in alcohol. A report on six extracts of peppermint.—J. Ind. & Eng. Chem. 1914, v. 6, p. 926–928.

Redfield, Harry W.: One cause of low results in the assay of peppermint oil is the low efficiency of the reflux condenser that is employed.—J. Ind. & Eng. Chem. 1914, v. 6, p. 401–402. See also Am. Perf. 1914, v. 9, p. 73.

Wöhlk, Alfred: A comparative examination of several commercial varieties of oil of peppermint and their control by the determination of menthol.—Ber. deutsch. pharm. Gesellsch. 1914, v. 24, p. 292–303.

Glickman, L. H.: Of five samples of oil of peppermint examined, only one was a trifle low in total menthol.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 150.

Jensen, H. R.: Twenty-nine samples of peppermint oil gave: Specific gravity, 0.8985 to 0.9075: refractive index, 1.459 to 1.4621; optical rotation, —22.37° to —28.8°; total menthol, 49.1 to 65.7 per cent; menthyl acetate, 5 to 11.7 per cent.—Evans' An. Notes, 1914, p. 51.

Cochran and Perkins: When 0.08 per cent of the oil is used, the value of the oils as preservatives of starch sirups is as follows: (1) Peppermint, (2) citronella, (3) juniper berry.—J. Ind. & Eng. Chem. 1914, v. 6, p. 306.

OLEUM MENTHÆ VIRIDIS.

U. S. P. IX: Rubric to require not less than 40 per cent by volume of carvone. Optical rotation to read from —35° to —50° in a 100 mm. tube at 25°. Assay for carvone added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1109, and Abstr. Prop. Changes, Part 5, 1914, p. 10.

Schimmel & Co.: According to the information gathered by our New York firm, the 1913 crop has yielded about 10,000 pounds of oil more than that of 1912.—Semi-Ann. Rep. April, 1914, p. 92.

Rabak, Frank: Oil of spearmint distilled during several successive seasons at Arlington exhibited decided variation of solubility in 80 per cent alcohol. One sample showed an optical rotation above that of the maximum in the Pharmacopœia.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1673.

Mann, E. R.: The characters and tests of both samples of oil of spearmint examined were practically in accord with the requirements of the Ph. Brit. V. Specific gravity was 0.931 and 0.930; rotation, —43.5° and —51°; refractive index, 1.4865 and 1.4855.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 40.

OLEUM MORRHUÆ.

Anon.: Supply of cod liver oil, a review.—Lancet, 1914, v. 186, p. 1476.

Mann, E. W.: The new official Ph. Brit. V monograph on cod liver oil shows a great advance on the old one, which was absolutely inadequate. The color tests are deleted, and a set of constants introduced, which appear to be quite satisfactory.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 12.

Fernau, Albert: Commercial samples of cod liver oil do not comply with the Ph. Austr. nitric acid test. The Ph. Austr. VIII iodine number is low and might be allowed to vary from 140 to 175.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 263.

Munn, W. A.: There are only two places in the world where the business of manufacturing cod liver oil has been carried on to any large extent; these are Norway and Newfoundland. The industry, in both places, is especially adapted to shore fisheries.—Montreal Pharm. J. 1914, v. 25, p. 192–197.

Gehe & Co.: A table showing the variations in the production of Norwegian cod liver oil during the years 1903 to 1914, inclusive.—Handelsbericht, 1914, p. 100. See also Pharm. J. 1914, v. 92, p. 428, and Brit. & Col. Drug. 1914, v. 65, p. 329–330.

Jolles, Adolf: The determination of cod liver oil in emulsions. A comparative review of several methods.—Apoth.-Ztg. 1914, v. 29, p. 695–697. See also Feist, K.: Apoth.-Ztg. 1914, v. 29, p. 744, and Pharm. Zentralh. 1914, v. 55, p. 582.

Jaenicke: The determination of fat in commercial cod liver oil emulsions.—Pharm. Ztg. 1914, v. 59, p. 188. See also Feyen, p. 252, and Zölfl, K., p. 542.

Jensen, H. R.: Thirty-three genuine samples of high quality medicinal Norwegian oils had: Specific gravity, 0.926 to 0.9275; refractive index, 1,4801 to 1.4813; acid value, 0.2 to 2.5; saponification value, 184.1 to 197.3; iodine value, 155.3 to 174.9.—Evans' An. Notes, 1914, p. 27.

Mayer, Joseph L.: The iodine number of 12 samples of cod liver oil was found to vary from 135 to 160.—Proc. New York Pharm. Assoc. 1914, p. 115.

Arends, Georg: Fixed formulas for emulsions of cod liver oil are not always satisfactory. Some oils are much more limpid than others and require special treatment.—Apoth.-Ztg. 1914, v. 29, p. 986.

Beringer, George M., jr.: A comparison of the value of various flavorings for emulsion of cod liver oil.—Proc. New Jersey Pharm. Assoc. 1914, p. 81–82.

Carlson, C. E.: The preparation of ferrated cod liver oil and the determination of the iron content.—Svensk farm. Tidskr. 1914, v. 18, p. 478–482.

Hommell, P. S.: The extracts of cod liver or of cod liver oil do not represent the remedial value of the oil.—Drug. Circ. 1914, v. 58, p. 74.

Osborne and Mendel: The influence of cod liver oil and some other fats on growth. The authors have obtained uniform success by substituting cod liver oil for a portion of the lard in their standard diets.—J. Biol. Chem. 1914, v. 17, p. 401–408.

Editorial Note: The unwavering popularity of cod liver oil in diseases of nutrition is all the more remarkable in this age of substitutes, which, in spite of vigorous pushing, have failed to oust the remedy of our childhood.—Lancet, 1914, v. 186, p. 1476.

OLEUM MYRSITICÆ.

U. S. P. IX: Specific gravity to read from 0.1859 to 0.924 at 25°. Optical rotation, from −14 to −30° in a 100-mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1109, and Abstr. Prop. Changes, Part 5, 1914, p. 10.

Mann, E. W.: A considerable amount of diversity obtains in the properties of oil of nutmeg. The official range is, however, very comprehensive and included the whole of the samples examined during 1913 and 1914.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 36.

Jensen, H. R.: Thirteen genuine samples of oil of nutmeg had: Specific gravity, 0.882 to 0.906; refractive index, 1.4746 to 1.4844; optical rotation, 10° 30′ to 24° 20′; nonvolatile residue per cent, 0.4 to 3.6.—Evans' An. Notes, 1914, p. 45.

OLEUM OLIVÆ.

Kantschieder, Joh. Slaus: The refining of olive oil and other fatty oils.—Arch. Chem. u. Micros. 1914, v. 7, p. 111–115. See also Bontoux, E.: Seifensieder Ztg. 1914, v. 41, p. 204–205, 233–234, 259–260, 286–287, 313–314, 342–344, 388–389, 416–417.

Roure-Bertrand Fils: The exports of olive oil from France are constantly on the increase to those countries which have customs tariffs which protect the pure product.—Sc. & Ind. Bull. April, 1914, p. 67–70.

Jackson, Cook, and Strickland: Olive oil alone should be dispensed whenever sweet oil or salad oil is called for.—Rep. Rhode Island F. & D. Com. 1914, p. 16.

Bohrisch, P.: A test for peanut oil should be added to the Ph. Germ. V requirements for olive oil.—Pharm. Zentralh. 1914, v. 55, p. 810; also Apoth.-Ztg. 1914, v. 29, p. 902.

Kühl, Hugo: A review of a number of available reactions for the testing of olive oil.—Südd. Apoth.-Ztg. 1914, v. 54, p. 86–87.

Rupp, E.: Modified method for applying the Halphen reaction.—Südd. Apoth.-Ztg. 1914, v. 54, p. 322; also Apoth.-Ztg. 1914, v. 29, p. 724.

Eastlick, R. W.: The possible danger from the deodorization of low-grade olive oil, a new branch of industry.—Am. Food J. 1914, v. 9, p. 112.

Canzoneri and Bianchini: The rancidity of olive oil and the oxidation of oleic acid in presence of light.—Ann. chim. applicata, 1914, v. 1, p. 24–32.

Alsberg, Carl L.: As a result of investigation, it is believed that in some instances olive oil is intentionally misbranded by the shippers.—Am. Food J. 1914, v. 9, p. 21. See also S. R. A.-Chem. 1914, p. 23.

Enz. Karl: Two samples of olive oil offered as superfine pure olive oil were found on examination to consist of mixtures of peanut oil and castor oil.—Südd. Apoth.-Ztg. 1914, v. 54, p. 429.

Galloway, B. T.: Adulteration and misbranding of olive oil. One lot of supposed pure olive oil was found to be adulterated with cotton seed oil.—S. R. A.-Chem. 1914, p. 104.

Notices of Judgment Nos. 2800, 2861, 2873, 2874, 2875, 2890, 3115, 3445, and 3477 relate to the adulteration and misbranding of olive oil.—S. R. A.-Chem. 1914, p. 36, 94, 103–104, 123, 333, 683, and 709.

Hankey, William T.: The specific gravity of 52 samples of olive oil was found to vary from 0.9088 to 0.9128.—Proc. Ohio Pharm. Assoc. 1914, p. 51.

Mann, E. W.: The examination of 144 samples of olive oil gave: Specific gravity, 0.915 to 0.918; saponification value, 188 to 194.7; iodine value, 80 to 87.5; refractive index, 1.4682 to 1.4701.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 20.

Jensen, H. R.: Seventy out of 100 samples of olive oil, all genuine, varied between 0.915 and 0.918 specific gravity; 1.4702 and 1.4708 refractive index; 79 and 88.7 iodine value; 0.7 and 7.1 free acid per cent.—Evans' An. Notes, 1914, p. 46.

Table showing some of the analytical results reported for olive oil.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	15	1	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, Lucius P	7	4	Bull. Tennessee F. & D. Dept. 1914, v. 1, No 1, p. 27.
Hortvet, Julius	32	4	Rep. Minnesota D. & F. Com. 1914, p. 47.
Jackson, Cook, and Strickland	223	99	Rep. Rhode Island F. & D. Com. 1914, p. 17.
Lythgoe, Hermann C	28	0	Rep. Massachusetts Bd. Health, 1914, p. 410
Mayer, Joseph L	15	0	Proc. New York Pharm. Assoc. 1914, p. 115.
Street, John Phillips	2	1	Rep. Connecticut Agric. Exper. Sta. 1914, p. 333.
Strode, Sylvanus E	5	2	Rep. Ohio D. & F. Div. 1914, p. 122.
Sudro, W. F	93	3	Rep. North Dakota F. Com. 1914, p. 34.
Todd, A. R	4	1	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd, A. R	4	1	Bull. Michigan D. & F. Dept. 1914, March-April, p. 19.
Wiedemann, H. C	26	1	Rep. Missouri F. & D. Com. 1914. p. 39.
Woods, Chas. D	6	4	Off. Insp. Maine Agric. Exper. Sta. 1914, No. 61, p. 101.

OLEUM PICIS LIQUIDÆ.

U. S. P. IX: Specific gravity to read from 1.012 to 1.065 at 25°. It is soluble in alcohol, the solution showing an acid reaction with itmus.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1109, and Abstr. Prop. Changes, Part 5, 1914, p. 10.

Roberts, J. G.: Oil of tar does not usually meet the requirements of the U. S. P., as it is generally very dark in color and has a high specific gravity. The U. S. P. specifies that it should have a specific gravity of about 0.892. We obtained the following specific gravities on three samples: 1.004, 1.05, and 1.027.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 152.

Hankey, William T.: The phenols in oil of tar were found to vary from 51 to 89 per cent.—Proc. Ohio Pharm. Assoc. 1914, p. 52.

OLEUM PIMENTÆ.

U. S. P. IX: Specific gravity to read from 1.18 to 1.48 at 25°. Optical rotation may vary from 0 to −4° in a 100 mm. tube at 25°. "Miscible in all proportions in 90 per cent alcohol" changes to "soluble in an equal volume of 90 per cent alcohol." Assay for eugenol as directed under Oleum Caryophylli.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1110, and Abstr. Prop. Changes, 1914, Part 5, p. 10.

Albright, Alan R.: The hydrogen number of commercial pimenta oil was found to be 87.8; the per cent of active constituent 71.5.—J. Am. Chem. Soc. 1914, v. 36, p. 2202.

Mann, E. W.: The specific gravity of two samples of oil of pimenta was 1.051 and 1.052; eugenol content 90 to 89 per cent; and refractive index 1.5334 and 1.5338, respectively.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 37.

OIL OF PINE NEEDLES.

Mann, E. W.: Samples of oil of *Pinus pumilio* showed a much lower percentage of esters than that now official in the Ph. Brit. Three samples examined varied in specific gravity from 0.865 to 0.869; rotation from −7.3° to −11.7°; esters as bornyl acetate from 4.9 to 92 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 38.

Jensen, H. R.: Nine samples of pumilio oil varied in specific gravity from 0.8695 to 0.873; refractive index from 1.4748 to 1.4762; optical rotation from −4° 50′ to −9° 30′; bornyl acetate average 4.9 per cent.—Evans' An. Notes, 1914, p. 53.

Toch, Maximilian: The chemistry of pine oil. Analyses of a number of samples of common pine oil presented in the form of tables.—J. Soc. Chem. Ind. 1914, v. 33, p. 576–578. For correction see p. 780.

Schorger, A. W.: Oils of the coniferæ. I. The lead and twig oils of Cuban and long-leaf pines and the cone oil of long-leaf pine, with an illustrated description of the apparatus used.—J. Ind. & Eng. Chem. 1914, v. 6, p. 723–727. See also p. 809–810.

OLEUM RICINI.

Grosh, Daniel M.: The cultivation of the castor oil bean.—Drug. Circ. 1914, v. 58, p. 197–198.

Berger, E.: Castor beans, their commercial cultivation and uses.—Proc. Florida Pharm. Assoc. 1914, p. 11–12.

Llewellyn, J. M.: Castor oil and castor bottle; a brief review of the distribution and use of this product.—Drug. Circ. 1914, v. 58, p. 203. See also p. 659.

Utech, P. H.: A harmless color for castor oil.—Am. Druggist, 1914, v. 62, p. 8.

Honovski, B. R.: Some transformation of ricinoleic and oleic acids.—J. Am. Chem. Soc. 1914, v. 36, p. 1028–1035.

Mann, E. W.: The misleading sulphuric acid test for castor oil has been deleted from the Ph. Brit. All the samples examined, 35 in number, gave results according with the new official Ph. Brit. requirements. The specific gravity ranged from 0.960 to 0.965; saponification value from 177.7 to 182.9; refractive index from 1.4777 to 1.4794.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 11.

Jensen, H. R.: Three hundred and fifty distinct samples of genuine castor oils gathered during the last three years gave the following figures: 0.2 to 6.7 per cent free acid; 0.6 to 5.3 per cent average acid; refractive index 1.4799 to 1.4813.—Evans' An. Notes, 1914, p. 19.

Anon.: Several formulas for tasteless castor oil.—Drug. Circ. 1914, v. 58, p. 214. See also p. 729.

Amos, W. S.: Aromatic castor oil is a good preparation and is in demand; a slight increase in the oil of cinnamon is advisable.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

Lander and Geake: The detection of castor seeds. The biological determination of ricin.—Analyst, 1914, v. 39, p. 292–293.

OLEUM ROSÆ.

Anon.: An illustrated description of the production of oil of rose in Bulgaria.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 344–346. See also p. 134.

Anon.: A description of the famous rose gardens of Lyon.—Montreal Pharm. J. 1914, v. 25, p. 80–81.

Gattefossé, R. M.: French otto from garden roses. A record of recent research in French roses in general.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 316–319.

Petkow, N.: The composition and the adulteration of oil of rose.—Ztschr. öffentl. Chem. 1914, v. 20, p. 149–153.

Lilly, J. K.: Two lots of oil of rose received from two different sources were found to be adulterated with oil of rose geranium.—Proc. N. W. D. A. 1914, p. 261; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Petkow, N.: In addition to oil of rose geranium the dealers in rose oil are now using synthetically prepared stereopten and ceril belonging to the group of the paraffins.—Apoth.-Ztg. 1914, v. 29, p. 491.

Anon.: Adulteration of rose oil with geranium oil may be recognized by the higher saponification number and refractive index.—Western Druggist, 1914, v. 36, p. 341.

Jensen, H. R.: Twenty samples of rose oil were tested during the year, but the quality of the supplies available, for reasons which will be readily understood, has been more unsatisfactory than for many years.—Evans' An. Notes, 1914, p. 56.

OLEUM ROSAMARINI.

U. S. P. IX: Solubility in 90 per cent alcohol omitted. Assay for ester and total borneol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1110, and Abstr. Prop. Changes, Part 5, 1914, p. 11.

Mann, E. W.: The majority of the oils examined were slightly levogyrate, the angle of rotation being usually less than 1°. A few samples were classed as adulterated, with marked levo-rotation and low specific gravity.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 38.

Jensen, H. R.: Twelve samples of pure "French" rosemary oils were found to vary within the following limits: Specific gravity, 0.897 to 0.911; refractive index, 1.4683 to 1.4725; optical rotation, $-1.50°$ to $+14.0°$; total borneol, 14 to 17 per cent; bornyl acetate, 2 to 2.5 per cent.—Evans' An. Notes, 1914, p. 57.

OLEUM SABINÆ.

Editorial: The oil of savin which is being passed into commerce from the south of France continues to be distilled from various species of *Juniperus*, including *Juniperus phoenicea*, and possibly *Juniperus thurifera*.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 131.

Mann, E. W.: The saponification values of four specimens of foreign oil of savin examined proved to average somewhat higher than those we reported upon in our last issue. Specific gravity was 0.903 to 0.915; rotation, $+51.7°$ to $+57.3°$; refractive index, 1.4721 to 1.4750.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 40.

Jensen, H. R.: One sample of savin oil had: Specific gravity, 0.9085; refractive index, 1.4736; optical rotation, $+61.45°$; saponification value, 117.0.—Evans' An. Notes, 1914, p. 60.

OLEUM SANTALI.

U. S. P. IX: Optical rotation to read from —15 to —20° in a 100 mm. tube at 25°. Modified assay for santalol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1110, and Abstr. Prop. Changes, Part 5, 1914, p. 11.

Holmes, E. M.: In recent years sandalwood plants have become affected by what is known as the spike disease.—Am. J. Pharm. 1914, v. 86, p. 31–37.

Roure-Bertrand Fils: Two tables showing the approximate quantities of various qualities of sandalwood which were put up at auctions in 1913 and the prices realized at these sales.—Sc. & Ind. Bull. April, 1914, p. 56–57.

Baker, H. D.: The sandalwood trade is controlled chiefly by about half a dozen leading European firms.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 64.

Lilly, J. K.: Sandalwood chips have been replaced frequently by raspings of an unknown wood. These raspings are bright red in color and possess none of the characteristics of sandalwood.—Proc. N. W. D. A. 1914, p. 263; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 35.

Maines, E. L.: Sandalwood was found to contain from 4.20 to 5.76 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Alsberg, C. L.: Misuse of the term "sandalwood oil." The proper name for West India sandalwood oil, which is in fact not a sandalwood oil at all, is oil of *Amyris balsamifera*, and this article should be labeled accordingly.—S. R. A.-Chem. 1914, p. 114.

Wende, E.: The determination of santalol content of oil of santal. A simplified method which gives results comparable with those obtained by the Ph. Germ. V method.—Apoth.-Ztg. 1914, v. 29, p. 541–542.

Baning and van der Wielen: The solubility in alcohol of oil of santal with a review of the requirements made in the several pharmacopœias and the examination of a number of samples of pure and mixed oil.—Pharm. Weekblad, 1914, v. 51, p. 1467–1470, and Apoth.-Ztg. 1914, v. 29, p. 963. See also van Itallie, E. I.: Pharm. Weekblad, 1914, v. 51, p. 1530–1531, 1489–1491, and 1491–1493.

E'we, G. E.: All samples of oil of santal examined were strictly U. S. P. in quality, ranging from 91.8 to 97 per cent of santalol, from 0.969 to 0.975 in specific gravity, and from —16° to —18.2° in optical rotation.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 151.

Hankey, William T.: Of 23 samples of oil of santal examined, 6 were rejected.—Proc. Ohio Pharm. Assoc. 1914, p. 52.

Mann, E. W.: Of the seven samples of oil of santal examined, five were soluble in 6 volumes of 70 per cent alcohol at 15°; the other two required in one case a temperature of 20°, in the other of nearly 30°, to effect clear solution.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 39.

Cline, R. R. D.: Samples of oil of santal were found running 98, 90, 85, 80; two only 60, and one containing only 50 per cent of santalol.—Proc. Texas Pharm. Assoc. 1914, p. 20.

J. D. Riedel, A.-G.: Report on the examination of seven samples of capsules of santalwood oil, with table showing the physical and chemical properties of the oil and the conclusion that crude adulterations of sandalwood capsules no longer occur.—Riedel's Berichte, 1914, p. 46.

Mann, H.: Sandalwood oil and its application in perfumery; a review.—Am. Perf. 1914, v. 9, p. 213–214.—Am. Perf. 1914, v. 9, p. 213–214.

Umney, J. C.: Oil of sandalwood is used in perfumery as well as for medicinal purposes. The oil is distilled from the wood of the Indian tree, which is largely cultivated in Mysore and Madras on Government plantations.—Perf. & Ess. Oil. Rec. 1914, v. 5, p. 13.

OLEUM SASSAFRAS.

U. S. P. IX: Specific gravity to read from 1.065 to 1.077 at 25°. Optical rotation from +3 to +4° in a 100 mm. tube at 25°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1110, and Abstr. Prop. Changes, Part 5, 1914, p. 11.

Albright, Alan R.: The hydrogen number of authentic sassafras oil was found to be 103.1; the per cent of active constituent, 81.1; theoretical per cent of active constituent, 80 per cent.—J. Am. Chem. Soc. 1914, v. 36, p. 2202.

Ewe, G. E.: Of two lots of oil of sassafras examined, both were strictly U. S. P., ranging from 1.066 to 1.070 in specific gravity, and from +3° to +4° in optical rotation.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 151.

Mann, E. W.: Nine samples of oil of sassafras gave the following results: Specific gravity, 1.076 to 1.085; rotation, +1.9° to +2.8°; refractive index, 1.5280 to 1.5324.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 39.

Cochran and Perkins: As a preservative of starch sirups sassafras is decidedly superior to sweet birch.—J. Ind. & Eng. Chem. 1914, v. 6, p. 307.

OIL OF SESAME.

U. S. P. IX: A fixed oil expressed from the seeds of one or more cultivated varieties of *Sesamum indicum* Linné (Fam. *Pedaliaceæ*). Preserve in well-closed containers. Sesame oil is a pale yellow, oily liquid, almost odorless, and having a bland taste. Slightly soluble in alcohol, miscible with ether, chloroform, petroleum benzin and carbon disulphide. Specific gravity, 0.916 to 0.921 at 25°. Iodine value not less than 103 nor more than 113.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1573, and Abstr. Prop. Changes, Part 6, 1914, p. 11.

E'we, G. E.: Of two lots of oil of sesame examined, both gave a bright green color in a hydrochloric acid milk sugar identification test. This green color reaction seems to indicate rancidity, since the green color is greater in the rancid samples.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 151.

Thoms, H.: A comparison of the physical and chemical properties of oil of sesame and of hydrogenated oil of sesame.—Arb. pharm. Inst. Univ. Berl. 1914, p. 145.

Wingard, Ake: Autoöxidation and the changes in physical characteristics of fatty oils.—Svensk farm. Tidskr. 1914, v. 18, p. 265–270, 281–287.

OLEUM SINAPIS VOLATILE.

U. S. P. IX: To require not less than 92 per cent of allyl isothiocyanate. The oil may be produced synthetically or obtained from the seed of *Brassica nigra.* Modified method of assay for allyl isothiocyanate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1110, and Abstr. Prop, Changes, Part 5, 1914, p. 11.

Wester, D. H.: Report of experiments on the influence of fertilizers on the oil content of mustard seed.—Ber. pharm. Gesellsch. 1914, v. 24, p. 123.

Schneider, Clibbens, Hüllweck, and Steibelt: Examination of the mustard oils.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 1248–1258. See also p. 1258–1269, Roschdestwiensky, M., p. 1947, and Schneider and Wrede, p. 2038–2043.

Mann, E. W.: A single sample of oil of mustard assayed for allyl isothiocyanate, etc., according to the method now official gave the following satisfactory figures: Specific gravity, 1.023; boiling range, 147°–149°; refractive index, 1.4310; allyl isothiocyanate, 96.2 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 35.

Jensen, H. R.: Seven samples of volatile oil of mustard gave the following values: Specific gravity, 1.019 to 1.023; refractive index, 1.5292 to 1.5305; optical rotation, 0° to − 0.10°. One sample gave: Specific gravity, 1.0225; refractive index, 1.5275; optical index, 0°.—Evans' An. Notes, 1914, p. 45.

Schwarz, Adolf: Inhalation of the vapors of the volatile oil of mustard in the treatment of toothache and of earache.—Münch. med. Wchnschr. 1914, v. 61, p. 420–421. See also Schimmel & Co.: Semi-Ann. Rep. April, 1914, p. 70.

OLEUM TEREBINTHINÆ.

U. S. P. IX: The volatile oil recently distilled from the concrete oleoresin obtained from *Pinus palustris* Mill and from other species of *Pinus* (Fam. *Pinaceæ*) with water below 100°. Optical rotation variable. Tests for resinous oils or their derivatives and for added mineral oils.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1573–1574, and Abstr. Prop. Changes, Part 6, 1914, p. 11–12.

Record, Samuel J.: Prolonging the naval-stores industry. An illustrated description of methods for tapping pine trees for turpentine.—Sci. Am. 1914, v. 110, p. 173, 186.

French and Withrow: The present status of the wood turpentine industry.—J. Ind. & Eng. Chem. 1914, v. 6, p. 148–152; also Tr. Am. Inst. Chem. Eng. 1914, v. 6, p. 217–231.

Whitaker and Bates: Chemical utilization of southern pine waste.—J. Am. & Eng. Chem. 1914, v. 6, p. 289–298.

Toch, Maximillian: The chemistry of pine oil obtained from wood waste.—J. Ind. & Eng. Chem. 1914, v. 6, p. 720–723.

Grimaldi and Prussia: The detection and determination of turpentine derivatives in oil of turpentine.—Chem.-Ztg. 1914, v. 38, p. 1001–1002; also Apoth.-Ztg. 1914, v. 29, p. 750.

Parow, E.: The thermal number of oil turpentine.—Chem.-Ztg. 1914, v. 38, p. 441.

Enz, Karl: Turpentine and oil of turpentine. A review of their physical and chemical properties.—Apoth.-Ztg. 1914, v. 29, p. 797.

Alsberg, C. L.: The development of permanent and standard type samples of rosin and turpentine.—Oil, Paint & Drug Rep. 1914, v. 86, December 7, p. 19.

Anon.: Proposed specifications for oil of turpentine from a report of the subcommittee of the American Society for Testing Materials.—Drugs, Oils & Paints, 1914, v. 30, p. 210–211.

Schorger, A. W.: A study of authentic samples of gum turpentine. The specific gravity at 15° will fall between 0.8659 and 0.8722, with an average of 0.8685. The index of refraction at 15° will fall between 1.4714 and 1.4746.—J. Ind. & Eng. Chem. 1914, v. 6, p. 541–548.

Herty and Graham: Isoprene from commercial turpentines.—J. Ind. & Eng. Chem. 1914, v. 6, p. 803–804.

Liberati and Vanderkleed: Of the 12 lots of oil of turpentine examined, 3 were a trifle low in specific gravity, ranging from 0.858 to 0.859.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 151.

Mann, E. W.: A marked range of optical rotatory power has been exhibited by 37 samples of oil of turpentine. The specific gravity was found to vary from 0.867 to 0.873; rotation from −6.5° to +17.2°; and refractive index 1.4700 to 1.4729.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 41.

Table showing some of the analytical results reported for oil of turpentine.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	4	0	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, Lucius P	17	3	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
Congdon, Leon A	3	2	Rep. Kansas Bd. Health, 1914, p. 100.
Jensen, H. R	29	1	Evans' An. Notes, 1914, p. 69.
Shannon, F. L	8	6	Rep. Michigan D. & F. Com. 1914, p. 147.
Shannon, F. L	3	3	Bull. Michigan D. & F. Dept. 1914, March—April, p. 13.
Stadtmueller, F. H	168	8	Rep. Connecticut D. & F. Com. 1914, p. 15.
Street, J. P	2	2	Rep. Connecticut Agric. Exper. Sta. 1914, p. 335.

OLEUM TEREBINTHINÆ RECTIFICATUM.

U. S. P. IX: The freshly distilled oil is to be dried by shaking it with anhydrous calcium chloride, and filtering. Specific gravity from 0.856 to 0.865 at 25°. Not more than 0.010 gm. of residue.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1110, and Abstr. Prop. Changes, Part 5, 1914, p. 11.

Noyes, C. R.: Many druggists are not aware that the U. S. P. requires that rectified oil of turpentine should always be dispensed for internal purposes.—J. Am. Pharm. Assoc. 1914, v. 3, p. 853; also Proc. Minnesota Pharm. Assoc. 1914, p. 190.

Anon.: A warning to users of oil of turpentine for medicinal or veterinarian purposes to make certain that it is not adulterated.—J. Am. Inst. Homœop. 1914, v. 6, p. 1131, and Drug Topics, 1914, v. 29, p. 57.

OLEUM THEOBROMATIS.

Häussler, E. P.: A short contribution on the history of theobroma.—Pharm. Zentralh. 1914, v. 55, p. 46–47.

Gehe & Co.: Table showing the amount of oil of theobroma exported from Germany during the years 1908–1913 and the destination of this material.—Handelsbericht, 1914, p. 98.

Bohrisch, P.: The Ph. Germ. V melting point determination for oil of theobroma is not satisfactory. The ether test is also objected to.—Apoth.-Ztg. 1914, v. 29, p. 902; also Pharm. Zentralh. 1914, v. 55, p. 909.

Kroeber, Ludwig: Critical observations on the examination of oil of theobroma according to the Ph. Germ. V.—Pharm. Praxis, 1914, v. 12, p. 427–429. See also Enz: Südd. Apoth.-Ztg. 1914, v. 54, p. 372.

Bohrisch and Kürschner: The examination of oil of theobroma, with tables giving the results obtained from the Ph. Germ. method, the Filsinger method, and the Björkland method of testing.—Pharm. Zentralh. 1914, v. 55, p. 191–203.

Grimme, Clement: The examination of cacao butter, with several tables giving the results obtained.—Pharm. Zentralh. 1914, v. 55, p. 285–288. See also Chem. Rev. Fett u. Harz Ind. 1914, v. 21, p. 47–49, 153–156, and Pharm. Ztg. 1914, v. 59, p. 284.

E'we, G. E.: Five lots of cacao butter examined melted at from 33° to 35°. One sample, to which all of the U. S. P. tests were applied, met all requirements, giving the following constants: Melting point, 33°; saponification value, 188.8; iodine value, 35.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 135.

Hankey, William T.: The melting point of 12 samples of cacao butter varied from 31.2° to 35°; the saponification value from 190.7 to 195.5; and the iodine value from 33.61 to 37.48.—Proc. Ohio Pharm. Assoc. 1914, p. 49.

Mann, E. W.: Of the 18 samples of cacao butter examined all but 1 gave satisfactory results; the single exception possessed a high iodine value, and probably contained a considerable proportion of one of the cacao substitutes.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 12.

Jensen, H. R.: Four genuine samples of cacao butter well refined had: Acid value, 0.8 to 2.2; saponification value, 194 to 199; iodine value, 35.2 to 39.9; melting point, 32° to 34°.—Evans' An. Notes, 1914, p. 26.

OLEUM THYMI.

U. S. P. IX: Specific gravity from 0.894 to 0.929 at 25°. Assay for phenols added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1110, and Abstr. Prop. Changes, Part 5, 1914, p. 11.

Beringer, George M.: A proposed monograph for thyme, the dried tops of *Thymus vulgaris* collected when the plant is in flower. Ash should not exceed 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1601.

Gutkind, Felix: An illustrated description of the distilling of oil of thyme in Spain.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 384. See also Spatula, 1914, v. 20, p. 165.

Rabak, Frank: A sample of oil of thyme obtained in 1910 was found to have a specific gravity slightly above the upper limits of the Pharmacopœia.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1673.

Baker, W. L.: Oil of thyme was found to be very dark in color.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

OPIUM.

U. S. P. IX: Obtained from *Papaver somniferum* and its variety album, with not more than 5 per cent of the capsules and leaves of the poppy plant and other foreign matter.—J. Am. Pharm. Assoc. 1914, v. 3, p. 393, and Abstr. Prop. Changes, Part 2, 1914, p. 35.

Anon.: An illustrated description of the flowering top of *Papaver somniferum* L.—Chem. & Drug. 1914, v. 84, p. 704. See also p. 672.

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Mann, E. W.: The occurrence of a considerable weight of leaden bullets showed that the old-time methods of adulteration are not yet extinct. The morphine content of eight parcels of opium (calculated as dry opium) varied from 12.2 to 16 per cent; moisture from 18.3 to 24.6 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 20.

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Table showing some of the analytical results reported for tincture of opium.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, L. A.	12	11	Proc. Kentucky Pharm. Assoc. 1914, p. 117.
Stadtmueller, F. H.	40	2	Rep. Connecticut D. & F. Com. 1914, p. 15.
Street, John Phillips	40	4	Rep. Connecticut Agric. Exper. Sta. 1914, p. 335.
Strode, Sylvanus E.	6	2	Rep. Ohio D. & F. Div. 1914, p. 119.
Thurston, Azor	5	5	Proc. Ohio Pharm. Assoc. 1914, p. 43; also Midl. Drug. 1914, v. 48, p. 363.
Todd, A. R.	29	4	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd, A. R.	9	3	Bull. Michigan D. & F. Dept. 1914, January–February, p. 17.

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Sargent, F. Pilkington: Paregoric; a study in evolution. A review of the origin and use of opium and the various complex preparations of opium.—Spatula, 1914, v. 20, p. 211–214, 271–274.

Todd, A. R.: Of 12 samples of paregoric examined, 1 was found to be adulterated.—Rep. Michigan D. & F. Com. 1914, p. 176.

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Kebler, L. F.: Outline of method for the determination of potassium bicarbonate in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1096.

Caven and Sand: The dissociation pressures of the alkali bicarbonates. Part II. Potassium, rubidium, and cæsium hydrogen carbonates.—J. Chem. Soc. Lond. 1914, v. 105, p. 2752–2761.

Hill, C. A.: Of 80 samples of potassium bicarbonate examined during the years 1910 to 1913, inclusive, the lead content varied from 0.5 to 11 parts per million. The arsenic content varied from 0 to 1 part per million.—Chem. & Drug. 1914, v. 85, p. 22. See also p. 18.

POTASSII BITARTRAS.

Mann, E. W.: The revisers of the Ph. Brit. have again raised the standard for acid potassium tartrate, 99 per cent pure bitartrate being now the minimum requirement.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 47.

Lefeldt, M.: The Ph. Germ. V test for sulphate and chloride in potassium bitartrate could be simplified.—Pharm. Ztg. 1914, v. 59, p. 43.

Hill, C. A.: Of 196 samples of acid potassium tartrate examined during the years 1910 to 1913, inclusive, the lead content varied from 12 to 50 parts per million. The arsenic content varied from 0 to 2 parts per million.—Chem. & Drug. 1914, v. 85, p. 22.

POTASSII BROMIDUM.

Hill, C. A.: Of 21 samples of potassium bromide examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 5 parts per million. The arsenic content varied from 0 to 0.8 parts per million.—Chem. & Drug. 1914, v. 85, p. 22. See also p. 18.

Jensen, H. R.: Forty-one samples of potassium bromide were estimated to contain 99.3 to 100 per cent (average 99.5) of total halogen salts as bromide.—Evans' An. Notes, 1914, p. 54.

Finnemore and Williamson: The incompatibility of strychnine and nux vomica with alkalies, iodides, and bromides.—Brit. & Col. Drug. 1914, v. 66, p. 76–77. See also Pharm. J. 1914, v. 92, p. 124–125. For discussion see p. 153.

Becker, Henry C.: Of the alkaline bromides the potassium salt is the strongest, most stable and reliable.—Merck's Arch. 1914, v. 16, p. 35.

Lehndorff, Arno: Observations on the action of bromides on the circulation.—Arch. exper. Path. u. Pharmakol. 1914, v. 76, p. 236–238. See also Carnot and Coirre: Pharm. J. 1914, v. 93, p. 458.

Braun, Israel: Bromides are useful as antispasmodics in the treatment of bronchial asthma, but inferior to other remedies, as the patient soon gains a tolerance.—Merck's Arch. 1914, v. 16, p. 107.

Weiss, Ludwig: An unusual case of bromoderma of the leg in a female, age 24, who had taken potassium bromide for a number of years.—J. Am. M. Assoc. 1914, v. 63, p. 635–639.

POTASSII CARBONAS.

Jensen, H. R.: Sixty-three samples of potassium carbonate were found to contain: Total strength as K_2CO_3, 82 to 84 per cent: chloride, as KCl, 0.06 to 1.2 per cent; arsenic 4 parts or less per million.—Evans' An. Notes, 1914, p. 55.

Mann, E. W.: Arsenical contamination is only infrequently found. Except for two samples, one-half part per million was the maximum observed.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 46.

Kohen, W.: Chlorate was found as an unexpected contamination of potassium carbonate.—Chem.-Ztg. 1914, v. 38, p. 898.

Hill, C. A.: Of 51 samples of potassium carbonate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 2.5 parts per million. The arsenic content varied from 0 to 1.6 parts per million.—Chem. & Drug. 1914, v. 85, p. 22. See also p. 18.

POTASSII CHLORAS.

U. S. P. IX: Test for heavy metals modified and method of assay added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1574, and Abstr. Prop. Changes, Part 6, 1914, p. 12.

Kolsky, G.: U. S. Patent 1,092,369. Process for making, electrolytically, chlorates and apparatus therefor.—J. Soc. Chem. Ind. 1914, v. 33, p. 549.

Hill, C. A.: Of 369 samples of potassium chlorate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 1.6 parts per million.—Chem. & Drug. 1914, v. 85, p. 22. See also p. 19.

Unna, Paul: A paste of potassium chlorate with chalk has been found efficient in the treatment of a variety of skin diseases of an inflammatory nature.—(Dermatol. Wchnschr. 1914, p. 1132) Apoth.-Ztg. 1914, v. 29, p. 848.

Editorial: Potassium chlorate is one of the most useful chemicals in the eclectic materia medica.—Eclectic M. J. 1914, v. 74, p. 429–430.

POTASSII CITRAS.

U. S. P. IX: To require not less than 8 per cent of anhydrous potassium citrate with small amounts of citric and carbonic acids. Formula modified; method of assay added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 531, and Abstr. Prop. Changes, Part 3, 1914, p. 8.

Jensen, H. R.: Two samples of potassium citrate containing 12 and 3 parts of arsenic per million were condemned; 20 further tests indicating the allowable amount of 1 part per million or less.—Evans' An. Notes, 1914, p. 55.

Hill, C. A.: Of 512 samples of potassium citrate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 7 parts per million. The arsenic content varied from 0 to 1 part per million.—Chem. & Drug. 1914, v. 85, p. 22.

POTASSII CYANIDUM.

Blish, W. G.: Potassium cyanide has been found very effectual in killing ants in lawns, and it does its work without killing the grass.—Science, 1914, v. 40, p. 637.

POTASSII ET SODII TARTRAS.

Alwood, William B.: Crystallization of cream of tartar in the fruit of grapes with tables giving percentage by weight of acids and acid salts in Concord grapes.—J. Agric. Research, 1914, v. 1, p. 513–514.

Hill, C. A.: Of 143 samples of soda tartarata examined during the years 1910 to 1913, inclusive, the lead content varied from 3 to 12 parts per million. The arsenic content varied from 0 to 3.5 parts per million.—Chem. & Drug. 1914, v. 85, p. 22.

Post, Wilber E.: Observations on the effect of tartrates on the human kidney.—J. Am. M. Assoc. 1914, v. 62, p. 593.

Salant and Smith: The toxicity of sodium tartrate.—Am. J. Physiol. 1914, v. 35, p. 239–261, and J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 515.

Salant, William. The pharmacology of sodium tartrate.—J. Am. M. Assoc. 1914, v. 63, p. 1076–1078, and Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 224–230.

Salant and Hecht: The influence of tartrates, citrates, and oxalates on the isolated heart.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 179.

POTASSIUM FORMATE.

Beringer, George M.: A proposed monograph for potassium formate. It should contain, when dried, not less than 98 per cent of potassium formate (KCOOH).—J. Am. Pharm. Assoc. 1914, v. 3, p. 1599.

POTASSIUM GLYCEROPHOSPHATE.

Umney and Bennett: Potassium glycerophosphate is not readily obtainable in the crystalline form. Solutions should be required to contain 75 per cent or 50 per cent of the anhydrous salt.—Pharm. J. 1914, v. 92, p. 135, and Year-Book of Pharmacy, 1914, p. 406.

Stockinger, O. L.: Potassium glycerophosphate varies greatly. Seven lots examined ranged from 63.25 to 83.3 per cent of normal potassium glycerophosphate.—Proc. Pennsylvania Pharm. Assoc. 1914, v. 154.

Dubois, G.: Potassium glycerophosphate decomposes in water more rapidly than sodium or calcium glycerophosphate and the decomposition is promoted by citric acids but is hindered by mineral acids.—Bull. Pharm. 1914, v. 28, p. 306. See also J. Ind. & Eng. Chem. 1914, v. 6, p. 127.

POTASSII HYDROXIDUM.

Fernau, Albert: The Ph. Austr. should require a minimum content of 80 per cent KOH and restrict the K_2CO_3 to 4.6 per cent.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Katayama and Ikeda: A chloroform solution of beta naphthol gives with concentrated potassium hydroxide a blue color.—J. Pharm. Soc. Japan, 1914, October, p. 1142.

U. S. P. IX: Rubric for solution of potassium hydroxide to read not less than 4.5 per cent of potassium hydroxide. Specific gravity about 1.046 at 25°. New tests for carbonate and a modified method of assay.—J. Am. Pharm. Assoc. 1914, v. 3, p. 531, and Abstr. Prop. Changes, Part 3, 1914, p. 8.

Zielle, Adolph: Of 60 samples of solution of potassium hydroxide examined, 17 were not within 10 per cent of official strength.—Rep. North Dakota Agric. Exper. Sta. 1914, v. 150–151.

POTASSII HYPOPHOSPHIS.

Baker, W. L.: The solubility of potassium hypophosphite was found to be not in accordance with the U. S. P.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

Anon.: The hypophosphite fallacy.—J. Am. M. Assoc. 1914, v. 62, p. 1346–1347.

POTASSII IODIDUM.

Stüwe, W.: A direct iodometric method for the determination of soluble iodides.—Apoth.-Ztg. 1914, v. 29, p. 382.

Bouyer, J.: The inalterability of solutions of potassium iodide and the rapid assay of commercial potassium iodide.—Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 371–377.

Fernau, Albert: A freshly prepared 5 per cent solution of potassium iodide should not be colored yellow on the addition of 2 or 3 drops of sulphuric acid.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 254.

Kebler, L. F.: Outline of method for the determination of potassium iodide in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1097.

Jensen, H. R.: One hundred and fifty samples of potassium iodide from various sources were found to contain a halogen equivalent to 99.5 to 100 per cent as potassium iodide (average 99.9 per cent).—Evans' An. Notes, 1914, p. 55.

Hill, C. A.: Of 49 samples of potassium iodide examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 2.5 parts per million. The arsenic content varied from 0 to 1 part per million.—Chem & Drug. 1914, v. 85, p. 22. See also p. 19.

E'we, G. E.: Two lots of potassium iodide examined during the year contained chlorides and bromides in slight excess, but were otherwise U. S. P. in quality.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 154.

Todd, A. R.: Two samples of potassium iodide examined were found to be adulterated.—Rep. Dairy & Food Com. Michigan, 1914, p. 176.

Carlson, C. E.: Deterioration of potassium iodide and methods for preventing it.—Svensk farm. Tidskr. 1914, v. 18, p. 565–568.

Herz, W.: The inner friction of aqueous potassium haloid salt solutions.—Ztschr. Anorg. Chem. 1914, v. 86, p. 338–340.

Wightman, Davis, Holmes, and Jones: Conductivity and viscosity of solutions of potassium iodide and of sodium iodide in mixtures of ethyl alcohol and water.—J. chim. phys. 1914, v. 12, p. 385–394.

Dunningham, A. C.: The system; ethyl ether-water-potassium iodide-mercuric iodide. Part 1. The underlying three-component systems.—J. Chem. Soc. Lond. 1914, v. 105, p. 368-379; also p. 724-733, and p. 2623–2639.

Finnemore and Williamson: The incompatibility of strychnine and nux vomica with alkalies, iodides, and bromides.—Brit. & Col. Drug. 1914, v. 66, p. 76-77, and Pharm. J. 1914, v. 92, p. 124–125. For discussion see p. 153.

Llewellyn, H. D.: A mixture of equal parts of hydrated wool fat and petrolatum produces a more sightly ointment than that made with benzoinated lard.—Proc. Missouri Pharm. Assoc. 1914, p. 143.

Anon.: Observations on the making of ointment of potassium iodide.—Apoth.-Ztg. 1914, v. 29, p. 167–169. See also Warnecke, G.: p. 194–195; Lorenzen, J., p. 210–211; Schneider, p. 211; and Vasterling, p. 237.

Fleissig: A note on the yellowish discoloration of ointment of potassium iodide.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 325–326.

Rupp, E.: Outline of method for the assay of ointment of potassium iodide.—Apoth.-Ztg. 1914, v. 29, p. 724; also Südd. Apoth.-Ztg. 1914, v. 54, p. 323.

Darge, P.: The determination of iodide in ointment of potassium using iron chloride as outlined in the method by Rupp and Schirmer.—Apoth.-Ztg. 1914, v. 29, p. 749–750.

Macht, D. I.: Action of the iodides on the heart and blood vessels.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 514. See also: J. H. Hosp. Bull. 1914, v. 25, p. 278-284; J. Am. M. Assoc. 1914, v. 63, p. 1325; and p. 1767–1768.

Hirsch, Edwin Frederick: An experimental study of the influence of iodine and iodides on the absorption of granulation tissue and fat-free tubercle bacilli.—J. Infect. Dis. 1914, v. 15, p. 487–500.

Grumme-Fohrde: On the danger of the internal administration of iodides in connection with the use of mercury in the eye.—Arch. exper. Path. u. Pharmakol. 1914, v. 77, p. 448–457.

Anon.: The iodised junket is a pleasant vehicle for potassium iodide.—Critic and Guide, 1914, v. 17, p. 117.

For additional references on potassium iodide see Chem. Abstr.; Chem. Zentralbl.; and J. Chem. Soc. Lond.

POTASSII NITRAS.

Jensen, H. R.: Seventy samples of potassium nitrate were examined, all of which were entirely free from contamination with sulphates and iron. Chlorides are almost entirely absent from the granular variety, but "crystals" usually contain 0.3 to 0.8 per cent (average 0.5) KCl.—Evans' An. Notes, 1914, p. 55.

Hill, C. A.: Of 48 samples of potassium nitrate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 3 parts per million. The arsenic content varied from 0 to 1 part per million.—Chem. & Drug. 1914, v. 85, p. 22.

Hankey, William T.: Fifteen samples of potassium nitrate examined complied with the U. S. P. tests for purity. No sample contained more than 2 per cent of chlorides.—Proc. Ohio Pharm. Assoc. 1914, p. 44.

Findlay, Morgan, and Morris: The solubility of the nitrates of potassium, barium, and strontium, and the stability of the double nitrate of potassium and barium.—J. Chem. Soc. Lond. 1914, v. 105, p. 779–782; also Proc. Chem. Soc. 1914, v. 30, p. 73.

Braun, Israel: The inhalation of fumes of niter-paper often gives prompt temporary relief in bronchial asthma.—Merck's Arch. 1914, v. 16, p. 106.

POTASSII PERMANGANAS.

Kebler, L. F.: Outline of method for the determination of potassium permanganate in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1097.

Anon.: Standardization of potassium permanganate solution.—Pacific Pharm. 1914, v. 8, p. 113.

Rogers, Leonard: Permanganates in sloughing and tetanus infected wounds.—Brit. M. J. 1914, v. 2, p. 1055–1056.

Dyer, Isadore: The use of potassium permanganate in the treatment of pellagra.—Merck's Arch. 1914, v. 16, p. 256.

Adler, E.: A case of suicide with potassium permanganate. A woman of 37 took 10 gm. of potassium permanganate in solid form and died on the fourth day.—J. Am. M. Assoc. 1914, v. 63, p. 1511.

POTASII SULPHAS.

Hill, C. A.: Of four samples of potassium sulphate examined during the years 1912 and 1913 the lead content varied from 30 to 80 parts per million. The arsenic content varied from 0.1 to 0.4 part per million.—Chem. & Drug. 1914, v. 85, p. 22.

PRUNUS VIRGINIANA.

U. S. P. IX: To consist of the stem bark. Usually in transverse curved pieces.—J. Am. Pharm. Assoc. 1914, v. 3, p. 396, and Abstr. Prop. Changes, Part 2, 1914, p. 38.

Maines, E. L.: Wild cherry bark was found to contain from 2.48 to 4.62 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

Llewellyn, H. D.: The 1890 formula for sirup of wild cherry should be readopted.—Proc. Missouri Pharm. Assoc. 1914, p. 143.

U. S. P. IX: The sugar has been increased to 800 gm. and the glycerin reduced to 50 cc. in sirup of wild cherry. The sugar is to be dissolved in the percolate by agitation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1576, and Abstr. Prop. Changes, Part 6, 1914, p. 14.

PULVERES.

Curry, Gordon L.: The nine official powders should be made by every retail druggist. Not even the busy store is excused from making Seidlitz powders.—Proc. Kentucky Pharm. Assoc. 1914, p. 58.

PULVIS ACETANILIDI COMPOSITUS.

Kaiser, W. F.: The present U. S. P. formula for compound acetanilide powder is an improvement on some of those formerly in use. The quantity of sodium bicarbonate has been increased and the tartaric acid eliminated.—Proc. Wisconsin Pharm. Assoc. 1914, p. 71.

PULVIS AROMATICUS.

U. S. P. IX: Description of the microscopic characteristics added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 551, and Abstr. Prop. Changes, Part 3, 1914, p. 28.

PULVIS ANTISEPTICUS.

Anon.: A formula for an improved soluble antiseptic powder is reprinted.—N. A. R. D. Notes, 1914, v. 18, p. 1171.

PULVIS EFFERVESCENS COMPOSITUS.

Brown, Linwood A.: An outline of a method for the assay of Seidlitz powders, including the determination of the weight of the powders, the assay of blue powders, and the determination of Rochelle salts.—J. Am. Pharm. Assoc. 1914, v. 3, p. 643–644.

Todd, A. R.: Of 16 samples of Seidlitz powders examined, 4 were found to be adulterated.—Rep. D. & F. Com. Michigan, 1914, p. 176.

Todd, A. R.: Of three samples of Seidlitz powders examined, one was found to be adulterated.—Bull. Michigan D. & F. Dept. 1914, July–August, p. 26.

PULVIS GLYCYRRHIZÆ COMPOSITUS.

Parkes and Major: The composition and analysis of compound licorice powder.—Analyst, 1914, v. 49, p. 160–162.

Gibson, W. Howieson: The deficiency of sulphur in compound licorice powder may be due to an inaccuracy in analysis. Owing to the presence of organic matter the usual method of oxidation of sulphur to sulphuric acid by nitric acid will easily give low results—about 4 per cent.—Chem. & Drug. 1914, v. 85, p. 72.

PULVIS IPECACUANUÆ ET OPII.

Gregory, William M.: The old formula for Dover's powder called for opium, ipecac, and potassium sulphate, for which last milk sugar is substituted in the newer formula. This lessens its efficiency very much.—New York M. J. 1914, v. 99, p. 884.

PYRETHRUM.

U. S. P. IX: Defined as the dried root. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 397, and Abstr. Prop. Changes, Part 2, 1914, p. 39.

QUASSIA.

U. S. P. IX: The Jamaica and Surinam quassia with distinct characteristics.—J. Am. Pharm. Assoc. 1914, v. 3, p. 397, and Abstr. Prop. Changes, Part 2, 1914, p. 39.

Maines, E. L.: Quassia chips were found to contain from 2 to 2.49 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Rippetoe, J. R.: Two samples of quassia were found to contain 3.45 and 6.34 per cent of alcohol (32 per cent) extract and 2.78 and 3.08 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 441.

J. D. Riedel, A.-G.: Surinam quassia contained from 1.3 to 7.7 per cent of ash.—Jamaica quassia contained from 3.2 to 7.3 per cent of ash, and from 5.6 to 7 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Parker, William B.: Quassiin as a contact insecticide. A review of the literature on quassiin.—Bull. U. S. Dept. Agric. No. 165, pp. 6.

U. S. P. IX: The tincture is to be made by percolating the drug with a menstruum of alcohol 1 volume and water 2 volumes.—J. Am. Pharm. Assoc. 1914, v. 3, p. 547, and Abstr. Prop. Changes, Part 3, 1914, p. 24.

Carlson, van de Erve, Lewis and Orr: The action of the so-called stomachics or bitters on the hunger mechanism. In therapeutic quantities the bitters including quassia have no effect on the gastric tonus and the gastric hunger contractions or on the parallel sensation of hunger.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 209–218.

QUERCUS.

Anon.: An illustrated description of *Quercus robur*, L.—Chem. & Drug. 1914, v. 84, p. 512.

J. D. Riedel, A.-G.: Quercus contained from 5.1 to 7.3 per cent of ash and from 17.9 to 19.1 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 31.

QUILLAJA.

Rippetoe, J. R.: Four samples of quillaja contained from 6.14 to 12.73 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 86, p. 441.

J. D. Riedel, A.-G.: Quillaja contained from 9.6 to 17.8 per cent of ash, from 25.4 to 37.1 per cent of extract soluble in water, and from 21.6 to 33.5 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

QUININA.

Stockinger, O. L.: All quinine samples examined were strictly U. S. P. except for a large variation in moisture content; one lot, for example, contained 10 per cent, another 20.6 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 155.

Tarugi, N.: The coefficient of the precipitability of quinine salts in saline solutions of variable concentrations.—Gaz. Chim. Ital. 1914, v. 44, p. 131–151.

Marden and Elliott: Between water, made alkaline with NH_4OH, and chloroform, the distribution coefficient of quinine was found to be very small so that three washings from 50 cc. of aqueous solution with 10 cc. portions of chloroform would nearly completely remove the quinine.—J. Ind. & Eng. Chem. 1914, v. 6, p. 933.

Broersma, R.: None of the four methods of assaying quinine and cinchona bark, submitted in competition for prize offered by the Preanger Cinchona League, was entirely satisfactory. The prize was divided between two of the competitors.—Chem. & Drug. 1914, v. 84, p. 857.

Simmonds, Charles: The estimation of strychnine in the presence of quinine.—Analyst, 1914, v. 39, p. 81–83.

Fieselmann, Sidney F.: An assay process for quinine tablets.—Am. J. Pharm. 1914, v. 86, p. 54–56; also Merck's Rep. 1914, v. 23, p. 144.

Barnard, H. E.: Three samples of quinine tablets examined; all illegal, being 32 to 60 per cent overweight.—Rep. Indiana Bd. Health, 1912, Indianapolis, 1914, p. 443, 455.

Brown, L. A.: Four samples of 3-grain quinine capsules were found to have from 4.38 to 2 grains in each capsule. This is due simply to lack of care in filling the capsules.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Lythgoe, Hermann C.: Thirty-six samples of 2-grain quinine pills were examined, 2 of which contained, respectively, 1.66 and 1.73 grains of quinine sulphate per pill; the balance contained about 2 grains per pill.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 409.

Howard, Charles D.: Three samples of quinine pills, purporting to be 2-grain, were 102, 78, and 66 per cent of the strength claimed.—Bull. New Hampshire Bd. Health, 1914, v. 3, p. 56.

Carter, H. R.: Quinine prophylaxis for malaria.—Public Health Rep. 1914, v. 29, p. 741–749; also J. Am. M. Assoc. 1914, v. 62, p. 2042.

Orenstein, A. J.: Contribution to the study of the value of quininization in the eradication of malaria.—J. Am. M. Assoc. 1914, v. 63, p. 1931–1933.

Brooke, Roger: The general action of quinine in the treatment of amebic dysentery.—J. Am. M. Assoc. 1914, v. 62, p. 1009–1010.

Isenschmid, R.: Experimental observations on the action of quinine on body temperature of animals without theremoregulation.—Arch. exper. Path. u. Pharm. 1914, v. 75, p. 10–32.

Macht, D. I.: Action of drugs on the isolated pulmonary artery. Quinine acted as a powerful vasodilator.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 24.

Frothingham and Halliday: The effect of quinine on rabbits inoculated with rabies.—J. Med. Research, 1914, v. 30, p. 275–280. See also Editorial: Therap. Gaz. 1914, v. 38, p. 852.

Cumming, James Gordon: The quinine treatment of rabies.—J. Infect. Dis. 1914, v. 15, p. 205–208.

Breitmann, M. J.: Quinine in the treatment of syphilis.—Therap. Monatsh. 1914, v. 28, p. 504–505.

Witham, E. Wells: The occurrence of tetanus following the hypodermic and intramuscular use of quinine.—Brit. M. J. 1914, v. 2, p. 1047. See also Editorial: Chem. & Drug. 1914, v. 85, p. 788, and Editorial: New York M. J. 1914, v. 100, p. 931–932.

Ross, Ronald: Intramuscular injections of quinine; a warning.—Lancet, 1914, v. 186, p. 1003–1004. See also reply by Tresidder, A. G.: p. 1647–1648.

Postle, F. D.: In overdoses quinine will cause a flushed face, headache, ringing in the ears, impairment of sight, and confusion of thought.—Eclectic M. J. 1914, v. 74, p. 513.

Jones, Edward T.: Quinine poisoning. A personal case. The symptoms following the ingestion of 100 grains of quinine sulphate in one dose.—Lancet, 1914, v. 186, p. 277–278.

Gimlette, John D.: Notes on three cases of quinine poisoning, two of which were fatal.—Lancet, 1914, v. 186, p. 174.

Myer, Leonard: A case of quinine poisoning, not fatal.—Lancet, 1914, v. 186, p. 819.

Pecker, Henri: Accidental poisoning by dragées of quinine containing 0.5 gm. of quinine. The total amount taken did not exceed 9 gms. of quinine hydrochloride.—J. pharm. et chim. 1914, v. 9, p. 162–163. See also Underhill, Elizabeth, J. Am. M. Assoc. 1914, v. 62, p. 1396–1397; also p. 920.

For additional comments on quinine see J. Am. M. Assoc.; Index Med.; Zentralbl. Biochem. Biophys.; Zentralbl. exper. Med.

QUININE AND UREA HYDROCHLORIDE.

Abstract: There is a certain element of danger attending the use of quinine-urea hydrochloride as a local anesthetic.—Pharm. J. 1914, v. 92, p. 368.

Herzig, Arthur J.: In nose and throat surgery quinine and urea hydrochloride has the advantage over cocaine in that it is nontoxic and hemostatic.—New York M. J. 1914, v. 99, p. 529–530.

Watson, Leigh F.: Three cases of hyperthyroidism satisfactorily treated by injections of quinine and urea hydrochloride.—J. Am. M. Assoc. 1914, v. 62, p. 126–127.

Editorial: The suggestion to use quinine urea hydrochloride in the treatment of neuralgia is in line with the satisfactory observations made in the use of this remedy as a local anesthetic.—Ellingwood's Therap. 1914, v. 8, p. 153.

QUININÆ HYDROBROMIDUM.

Anon.: Quinine hydrobromide as a pellagra cure. An abstract of an article by Dyer.—Am. J. Clin. Med. 1914, v. 21, p. 1002–1003.

QUININÆ HYDROCHLORIDUM.

Jensen, H. R.: Gravimetrically 81 per cent of quinine was found in quinine hydrochloride, and by indirect deduction from an acid estimation with alkali (phenolphthalein), 82.7 per cent.—Evans' An. Notes, 1914, p. 56.

QUININÆ SULPHAS.

Watson, G. N.: Quinine sulphate when treated with a few drops of a freshly prepared saturated alcoholic solution of alphanaphthol to which a few drops of concentrated sulphuric acid (2 drops to each cc.) have been added, gives a yellow precipitate. When the reagent is added in excess, a yellow solution is produced.—Drug. Circ. 1914, v. 58, p. 14.

E'we, G. E.: Of eight samples of quinine sulphate examined, six were effloresced, causing assays ranging from 100.8 to 104.1 per cent of the official salt. Two others assayed 99 and 99.3 per cent, due to slight excess of water.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 155.

Brown, L. A.: Three samples of quinine sulphate tablets analyzed; two passed and one adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Scoville, W. L.: The incompatibility of quinine sulphate and aspirin is probably due to the fact that quinine is changed by organic acids into an isomeric poisonous body known as quinotoxin.—Bull. Pharm. 1914, v. 28, p. 527.

QUININE TANNATE.

Rupp, E.: Outline of method for determining the quinine content of quinine tannate.—Apoth.-Ztg. 1914, v. 29, p. 723, and Südd. Apoth.-Ztg. 1914, v. 54, p. 314.

Carter, H. R.: The insoluble salts of quinine are better borne—that is, cause less discomfort—than the soluble. The tannate is the most insoluble and is said to be the best borne.—J. Am. M. Assoc. 1914, v. 62, p. 2042.

QUININE VALERATE.

Beringer, George M.: A proposed monograph for quinine valerate, the valerate of the alkaloid quinine. On incinerating 1 gm. not more than 0.1 per cent of ash should remain.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1600.

RENNIN.

Ewe, G. E.: Rennin is quite variable in milk coagulating power. Twelve of the 13 samples examined ranged from 1:16775 to 1:62000. The other sample acted in a peculiar manner.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 155.

RESINA.

U. S. P. IX: Specific gravity to read from 1.07 to 1.09 at 25°. Ash not exceeding 0.05 per cent. The alcoholic solution shows an acid reaction.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1574, and Abstr. Prop. Changes, Part 6, 1914, p. 12.

Alsberg, C. L.: Rosin and turpentine are produced annually to the value of about $50,000,000.—Oil, Paint & Drug Rep. 1914, v. 86, December 7, p. 19.

U. S. Patent 1,082.526, covers process of obtaining rosin and turpentine from wood.—J. Soc. Chem. Ind. 1914, v. 33, p. 149.

Paul, Ludwig: New melting points of colophony and their determination.—Chem. Rev. Fett u. Harz Ind. 1914, v. 21, p. 102-105.

Wolff and Scholze: The determination of colophony in varnishes, oils, and soaps.—Chem.-Ztg. 1914, v. 38, p. 369-370, 382-383.

Paul, Ludwig: The water-soluble resin acids in American rosin.—Chem. Rev. Fett u. Harz Ind. 1914, v. 21, p. 5-8, 36-39, 53-56, 78-80.

Noyes, C. R.: Powdered rosin usually contains from 25 to 50 per cent of a filler, bran, flour, etc., put in, not to adulterate it, but to overcome the difficulty of manufacture.—Proc. Minnesota Pharm. Assoc. 1914, p. 191, and J. Am. Pharm. Assoc. 1914, v. 3, p. 854.

Köhler, John: A review of the recent work on resins, rosin, and related products.—Monit. Sci. 1914, v. 80, p. 87–114.

Finck, Julius: Solutions of rosin and of a resinous material for use in the treatment of wounds.—Münch. med. Wchnschr. 1914, v. 61, p. 1175–1178. See also Fiessler and Bossert, p. 2396; Dieterich, K., p. 2203–2204, 2455; also J. Pharm. Elsass-Lothr. 1914, v. 41, p. 297–300, and Apoth.-Ztg. 1914, v. 29, p. 914.

RESINA JALAPÆ.

U. S. P. IX: An abstract of proposed changes and new standards for the official resins.—J. Am. Pharm. Assoc. 1914, v. 3, p. 544, and Abstr. Prop. Changes, Part 3, 1914, p. 21.

Maines and Gardner: In the manufacture of resin of jalap, great care should be taken to wash out all extractive matter with both hot and cold water. If this is done properly, the resulting yield will be nonhygroscopic.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1326, and Merck's Rep. 1914, v. 23, p. 275.

RESINA PODOPHYLLI.

U. S. P. IX: To include a test for differentiating official resin from that obtained from *Podophylli emodi.* Ash not exceeding 15 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 544, and Abstr. Prop. Changes, Part 3, 1914, p. 21.

Mann, E. W.: In the Ph. Brit. V., the characters and tests for the resin of Indian podophyllin are stated to be the same as those of the resin of *Podophyllum peltatum*, and as one of the characters prescribed the resin is to be entirely or almost entirely soluble in solution of ammonia.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 52–53.

Jenkins, W. M.: A method for the estimation of podophyllum resin.—J. Ind. & Eng. Chem. 1914, v. 6, p. 671–672, and Chem. Eng. 1914, v. 20, p. 129–130, 206–207.

Jensen, H. R.: No accurate standardization of podophyllin resin is at present possible.—Evans' An. Notes, 1914, p. 53.

Rippetoe, J. R.: One sample of resin of podophyllum was found to contain 96.85 per cent of alcohol extract, 6.58 per cent of water extract, and 9.33 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 441.

Baker, W. L.: Two lots of podophyllin were rejected; they were deficient in alcohol-soluble content and high in ash content.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

E'we, G. E.: Of the four lots of podophyllin examined, all practically answered the U. S. P. requirements. They ranged from 98.9 to 99.8 per cent alcohol soluble matter and from 0.18 to 0.86 per cent of ash.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 154.

Roberts, J. G.: Only one of the three samples of podophyllin examined was of U. S. P. quality. One yielded an excess of ash and the other was insufficiently soluble in ether, alcohol, or chloroform and yielded an excess of ash.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 154.

Warren, L. E.: The determination of podophyllin in PoDoLax, a mixture containing phenolphthalein and senna.—Rep. Chem. Lab. Am. M. Assoc. 1914, v. 7, p. 18.

RESINA SCAMMONII.

U. S. P. IX: Resin of scammony should be free from guaiac, jalap, rosin, or resin of false scammony.—J. Am. Pharm. Assoc. 1914, v. 3, p. 544, and Abstr. Prop. Changes, Part 3, 1914, p. 21.

Mann, E. W.: The scammony resin now official may be derived either from true scammony or Orizaba jalap, and we presume that the standard inserted for ether solubility is placed at so low a figure as 75 per cent in order to admit the resin from Orizaba jalap.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 53. See also Chem. & Drug. 1914, v. 85, p. 490.

Jensen, H. R.: One sample of scammony resin, possibly derived from Orizaba root, which, however, only yielded the exceptionally low amount of 8.1 per cent resin, had acid value, 17.5; saponification value, 194.5; ester value, 177; iodine value, 35.9.—Evans' An. Notes, 1914, p. 60.

Roberts, J. G.: Scammony resin was marked "U. S. P.," but upon subjecting it to the ether solubility test, we found that it was only 49.5 per cent soluble.—Proc. Pennsylvania Pharm Assoc. 1914, p. 156.

E'we and Vanderkleed: Occurrence of guaiac resin in scammony resin. The U. S. P. test for guaiac should be repeated under resin of scammony.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1683.

RESORCINOL.

Anon.: The Ph. Brit. V. includes Resorcinum, synonym resorcinol.—Chem. & Drug. 1914, v. 85, p. 487.

Williams, Joseph H.: Outline of method for making resorcin.—Pharm. J. 1914, v. 93, p. 294. See also Southern Pharm. J. 1914, v. 7, p. 61.

Williams, Ed. E.: In making resorcin ointment use anhydrous wool fat instead of the hydrous and use the water necessary to hydrate the wool fat to dissolve the resorcin.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Heiser, Victor G.: Report of two cases of leprosy with apparent cure following treatment by a mixture of chaulmoogra oil, resorcin, and camphorated oil.—Public Health Rep. 1914, v. 29, p. 21-22.

Gortner and Banta: Resorcinol in 0.05 to 0.01 per cent concentration is fairly toxic to amphibian eggs and embryos.—Biochem. Bull. 1914, v. 3, p. 367.

RHAMNUS PURSHIANA.

U. S. P. IX: The dried bark of the trunk and branches of *Rhamnus purshiana.* Description elaborated. Ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 397, and Abstr. Prop. Changes, Part 2, 1914, p. 39.

Gathercoal, E. N.: A criticism of the chemical tests for frangula and rhamnus purshiana as proposed for the new U. S. P.—J. Am. Pharm. Assoc. 1914, v. 3, p. 982–983.

Johnson and Hindman: Rhamnus purshiana; its history, growth, methods of collection, and bibliography; with illustrations.—Am. J. Pharm. 1914, v. 86, p. 387–413. See also Am. Druggist, 1914, v. 62, p. 90.

Farwell, Oliver A.: The medullary ray cells in *Rhamnus purshiana* and in *Rhamnus californica.*—J. Am. Pharm. Assoc. 1914, v. 3, p. 649–650.

Warren, L. E.: The detection of emodin-bearing drugs in the presence of phenolphthalein.—Am. J. Pharm. 1914, v. 86, p. 444–449, and Rep. Chem. Lab. Am. M. Assoc. 1914, v. 7, p. 19–24.

Linke, H.: The Ph. Germ. V. requires at least 24 per cent of extract and permits not exceeding 6 per cent of ash. The method of determining extract content should be outlined.—Apoth.-Ztg. 1914, v. 29, p. 539.

Rippetoe, J. R.: Three samples of cascara sagrada were found to contain from 22.20 to 25.69 per cent of alcohol extract and from 26.97 to 28.05 per cent of water extract.—Am. J. Pharm. 1914, v. 86, p. 437.

Maines, E. L.: Cascara sagrada was found to contain 4.70 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Mann, E. W.: Water soluble matter in 25 samples of cascara sagrada ranged from 21.6 to 27.6 per cent, with an average of 24.4 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 10.

J. D. Riedel, A.-G.: Cascara sagrada contained from 4.8 to 8.7 per cent of ash, and from 29.5 to 32.4 per cent of extract soluble in 3 parts alcohol and 7 parts water.—Riedel's Berichte, 1914, p. 31.

Gathercoal, E. N.: A sample of bark found as an adulterant of cascara had all the earmarks of a cherry bark, and as on maceration in water a slight odor of hydrocyanic acid was observed it probably was from a species of cherry.—J. Am. Pharm. Assoc. 1914, v. 3, p. 151.

U. S. P. IX: One gm. of the powdered extract to represent 3 gm. of the drug. Dried starch to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 534, and Abstr. Prop. Changes, Part 3, 1914, p. 11.

Becker, I. A.: The commercial powdered extract of cascara sagrada is usually claimed to be four times the strength of the drug and there is no good reason why the Pharmacopœia should direct that this preparation should be only three times the strength of the drug.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1024, and Nat. Druggist, 1914, v. 44, p. 419.

U. S. P. IX: The fluid extract to be made by extracting the drug with water; percolate to be evaporated to 750 cc. and 250 cc. of alcohol added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 541, and Abstr. Prop. Changes, Part 3, 1914, p. 18.

Helch, Hans: Identity reactions for the constituents of cascara would be desirable to distinguish the fluid extract of cascara from the fluid extract of frangula.—Pharm. Post. 1914, v. 47, p. 573.

U. S. P. IX: New formula for aromatic fluid extract of cascara sagrada.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1569–1570, and Abstr. Prop. Changes, Part 6, 1914, p. 7–8.

Maines and Gardner: Suggestions for making aromatic fluid extract of cascara sagrada.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1326, and Merck's Rep. 1914, v. 23, p. 274–275.

Elwe and Vanderkleed: Aromatic fluid extract of cascara sagrada was found to dissolve lead and also to form precipitates containing lead.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1685.

Smith, Ernest R.: The proposed fluid glycerate of cascara sagrada seems to be of good quality and the drug is entirely exhausted of its desirable constituents. The aromatic fluid glycerate of cascara sagrada is an excellent preparation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 324.

Burrell, Thos.: A formula for elixir cascara B. P. C., which obviates the difficulty of dissolving the ammoniated glycyrrhizin.—Pharm. J. 1914, v. 92, p. 558.

Chistoni, Alfredo: On the purgative action of the glucosides of cascara sagrada when introduced hypodermically; with reports on animal experiments.—Arch. farmacol. sper. 1914, v. 17, p. 99–123.

RHEUM.

U. S. P. IX: The characteristics of several forms of rheum are described. Monograph elaborated. Ash not exceeding 13 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 398, and Abstr. Prop. Changes, Part 2, 1914, p. 40.

Editorial: The medicinal rhubarbs do well in California.—Pacific Pharm. 1914, v. 7, p. 207.

Anon.: Rhubarb is chiefly purchased for the trade at the town of Hankow on the upper Yangtse, the yearly export amounting to nearly 700,000 pounds.—Meyer Bros. Drug. 1914, v. 35, p. 292.

Rosenthaler and Kiene: The microscopical characteristics of a new variety of Chinese rhubarb, probably Chinese or Asiatic specimens of rhapontic rhubarb.—Ber. deutsch. pharm. Gesellsch. 1914, v. 24, p. 234–243.

Caesar & Loretz: The valuation of rhubarb, with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 98–100.

Rosenthaler, L.: Observations on the drying of rhubarb. The absence of converted starch in the dried drug suggests that the drying has been at a moderately low temperature.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 405–406.

Gehe & Co.: The differentiation of official rhubarb from the rhapontic root by microscopic means is not satisfactory. The difficulty may be overcome by the proposition to determine the presence of rhaponticin.—Handelsbericht. 1914, p. 115–116, and Südd. Apoth.-Ztg. 1914, v. 54, p. 239.

Juillet: The detection of *Rheum rhaponticum* in powdered Chinese rhubarb depends on the detection of rhaponticin, a glucoside that does not occur in the latter drug.—Apoth.-Ztg. 1914, v. 29, p. 872, and abstract, Pharm. Era, 1914, v. 47, p. 555.

Maines, E. L.: Rhubarb root, granular, was found to contain from 5.93 to 9.21 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Rippetoe, J. R.: Eight samples of rhubarb were found to contain from 37.70 to 44.45 per cent of alcohol (78 per cent) extract, and from 5.28 to 8.27 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 441.

J. D. Riedel, A.-G.: Rhubarb contained from 7.1 to 12.8 per cent of ash and from 46.6 to 51 per cent of extract soluble in 1 part alcohol and 1 part water.—Riedel's Berichte, 1914, p. 33.

Mann, E. W.: Ash yield for a number of batches of powder of varying grades of rhubarb from our mills ranged from 6.1 to 9.1 per cent, in no case approaching the Ph. Brit. maximum of 15 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 22.

Bailey, E. Monroe: Some reactions of chrysophanic acid with reference to its detection in complex medicinal preparations.—J. Ind. & Eng. Chem. 1914, v. 6, p. 320–321.

Warren, L. E.: The detection of emodin-bearing drugs in presence of phenolphthalein.—Am. J. Pharm. 1914, v. 86, p. 444–449, and Rep. Chem. Lab. Am. M. Assoc. 1914, v. 7, p. 19–24.

U. S. P. IX: One gm. of the powdered extract to represent 2 gm. of the drug. Magnesium oxide and dried starch to be used as the diluent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 537, and Abstr. Prop. Changes, Part 3, 1914, p. 14.

U. S. P. IX: A description of the microscopic appearance of the constituents of compound rhubarb powder.—J. Am. Pharm. Assoc. 1914, v. 3, p. 552, and Abstr. Prop. Changes, Part 3, 1914, p. 29.

U. S. P. IX: In making tincture of rhubarb 30 gm. of cardamom seed to replace 40 gm. of cardamom, U. S. P. VIII. The first menstruum to consist of a mixture of glycerin, alcohol, and water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 547, and Abstr. Prop. Changes, Part 3, 1914, p. 24.

U. S. P. IX: The aromatic tincture of rhubarb to be assayed before being finished.—J. Am. Pharm. Assoc. 1914, v. 3, p. 547, and Abstr. Prop. Changes, Part 3, 1914, p. 24.

Sayre, Edward A.: In making the official mixture of rhubarb and soda the mixture should be allowed to stand for three or four days, then strained through muslin or a straining cloth.—Proc. New Jersey Pharm. Assoc. 1914, p. 80. See also Hommell, Philemon E.: Merck's Rep. 1914, v. 23, p. 27–28.

Williams, Ed. E.: Mixture of rhubarb and soda, U. S. P., and mixture of rhubarb compound, N. F., are nearly identical preparations—one is about one-third stronger than the other. One of these preparations is superfluous and should be dismissed.—Proc. Wisconsin Pharm. Assoc. 1914, p. 22.

Smith, Ernest R.: The proposed fluid glycerate of rhubarb is a thick, clear, brownish-black liquid, free from sediment, and has the appearance of an excellent preparation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 325.

RHUS GLABRA.

Henkel, Alice: An illustrated description of *Rhus glabra* L.—Spatula, 1914, v. 20, p. 408, and Phys. Drug. News, 1914, v. 9, p. 155.

Beringer, George M., jr.: Of six samples of sumach berries examined one showed the characteristic long hairs of *Rhus typhina:* one was a very poor sample of *Rhus glabra;* the remaining four were true to the name.—Proc. New Jersey Pharm. Assoc. 1914, p. 111.

Rippetoe, J. R.: One sample of sumach berries was found to contain 10.59 per cent of alcohol (49 per cent) extract and 2.09 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

ROSA GALLICA.

Anon.: An illustrated description of the flowering branch of *Rosa canina.*—Chem. & Drug. 1914, v. 84, p. 888.

Maines, E. L.: Red rose leaves were found to contain from 3.27 to 4.06 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

J. D. Riedel, A.-G.: Rose contained from 4 to 5.6 per cent of ash and from 42.3 to 46.9 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

RUBUS.

Henkel, Alice: An illustrated description of *Rubus occidentalis*, L. and *Rubus strigosum* Michx.—Phys. Drug. News, 1914, v. 9, p. 153. and Spatula, 1914, v. 20, p. 352.

Burmeister. H.: Some practical points in the technic of preparing raspberry juice.—Pharm. Zentralh. 1914, v. 55, p. 1031–1033.

SABAL.

U. S. P. IX.: The partially dried ripe fruit of *Serenoa serrulata*.—J. Am. Pharm. Assoc. 1914, v. 3, p. 399, and Abstr. Prop. Changes, Part 2, 1914, p. 41.

Henkel, Alice: An illustrated description of *Serenoa serrulata* (Michx.) Hook.—Phys. Drug. News, 1914, v. 9, p. 121, and Spatula, 1914, v. 20, p. 284.

Maines, E. L.: Saw palmetto berries dried were found to contain from 1.81 to 3.07 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Rippetoe, J. R.: One sample of saw palmetto was found to contain 20.26 per cent of alcohol extract and 30.5 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 442.

Beringer, George M, jr.: Two samples of saw palmetto berries were received. One was very hard and dry—either very old stock or immature fruit, or both. The other was soft and oily, as it should be when in prime fresh condition.—Proc. New Jersey Pharm. Assoc. 1914, p. 111.

U. S. P. IX: Fluid extract of sabal to be made from the drug in No. 20 powder and a mixture of alcohol 4 volumes and water 1 volume to be used as a menstruum.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes, Part 3, 1914, p. 20.

SABINA.

Anon.: An illustrated description of *Juniperus sabina* L.—Chem. & Drug. 1914, v. 84, p. 141.

Lilly, J. K.: Savin has been replaced in several shipments by other species of juniper. True savin can only be identified by careful microscopic examination.—Proc. N. W. D. A. 1914, p. 263, Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 35.

SACCHARUM.

Williams, Ed. E.: Sugar of the U. S. P. should be the grade commercially known as Confectioners' Crystal A. This makes a sirup absolutely colorless and brilliantly clear.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Anon.: The word "candy" is of oriental origin and means simply sugar.—Montreal Pharm. J. 1914, v. 25, p. 19–20.

Licht, Otto: The total production of sugar, with tables showing the total trade in crude sugar in various parts of the world during the years 1903 to 1913, inclusive.—Tropenpflanzer, 1914, v. 18, p. 160–165.

Wagner, T. B.: The origin of the beet sugar industry in Europe.—J. Ind. & Eng. Chem. 1914, v. 6, p. 71.

von Lippmann, Edmund O. L.: A review of progress in the manufacture of beet sugar during the year 1913.—Chem.-Ztg. 1914, v. 38, p. 97–100.

Wagner, T. B.: The first beet sugar factory was built in Germany in 1801.—Oil, Paint & Drug Rep. 1914, v. 85, February 2, p. 35.

Backer, H. J.: The first Dutch beet sugar factory, 1811-1814.—Chem. Weekblad, 1914, v. 11, p. 940–943.

Browne, C. A.: A book review of a volume on Plantation White Sugar Manufacture, by W. H. Th. Harloff and H. Schmidt, translated from the second revised Dutch edition by James P. Ogilvie.—J. Ind. & Eng. Chem. 1914, v. 6, p. 175.

Meyer, H. C.: Strontium in the beet sugar industry.—J. Ind. & Eng. Chem. 1914, v. 6, p. 1036–1037.

Alsberg, Carl L.: Pure cane sugar is being prepared for use in determining the polariscopic standards for cane sugar. Cane sugar has been estimated by means of an enzyme from yeast.—Am. Food J. 1914, v. 9, p. 22.

Bates and Phelps: Influence of atmospheric conditons in the testing of sugars.—Bull. Bur. Standards, 1914, v. 10, p. 537–555; also Dept. Com. Bur. Stand. Sc. Papers No. 221, and J. Washington Acad. 1914, v. 4, p. 317–318.

Browne, C. A.: A book review of a volume on Sugar Analysis.—J. Ind. & Eng. Chem. 1914, v. 6, p. 526.

Burrows, G. J.: The inversion of sucrose by acids in water-alcohol solutions.—J. Chem. Soc. Lond. 1914, v. 105, p. 1260–1270, and Chem. News, 1914, v. 110, p. 126.

Bourquelot and Bridel: Action of invertase on sucrose in methyl and in ethyl alcohol of different strengths.—J. pharm. et chim. 1914, v. 9, p. 321–327.

Rossi, G.: The influence of glycerin on the alcoholic fermentation and inversion of sugar.—Boll. chim.-farm. 1914, v. 53, p. 657–659.

Boysen-Jensen, P.: The decomposition of sugar in the course of alcoholic fermentation.—Biochem. Ztschr. 1914, v. 58, p. 451–466.

Powell, C. W. P.: The viscosity of sugar solutions.—J. Chem. Soc. Lond. 1914, v. 105, p. 1–23. See also Green, Heber, Proc. Chem. Soc. 1914, v. 30, p. 158.

Kluyver, A. J.: The determination of sugar in confitures and analogous substances by chemical and by biological methods.—Compt. rend. Congr. Internat. Pharm. 1913, v. 2, p. 1032–1046.

Rakshit, Jitendra Nath: Estimation of sucrose in the presence of lactose.—J. Ind. & Eng. Chem. 1914, v. 6, p. 307–308.

Haskell, Chas. C.: The comparative value of various sugars in the feeding of infants.—Lilly Sci. Bull. 1914, Ser. 1, p. 136–150.

Harry, Philip A.: The use of sugar in ozena, applied in the form of powder.—Prescriber, 1914, v. 8, p. 15–16.

Lo Monaco, Domenico: The action of sugar on the secretions.—Arch. farmacol. sper. 1914, v. 17, p. 127–144, 145–177.

Blosser, Roy: Preliminary report on the possible harmful effects of certain sugar cane products.—J. Am. M. Assoc. 1914, v. 63, p. 481–482.

Abderhalden and Wildermuth: A further study of the behavior of blood serum toward cane sugar before and after the parenteral introduction of this di-saccharine.—Ztschr. physiol. Chem. 1914, v. 90, p. 388–418. See also Abderhalden and Grigorescu, p. 419–436.

Editorial: The therapeutic uses of sugar.—Med. Rec. 1914, v. 86, p. 339.

For additional references on sugar see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; J. Am. M. Assoc.

SACCHARUM LACTIS.

Fernau, Albert: The resorcin hydrochloric-acid test is too delicate when heating is continued for five minutes. The concentrated sulphuric-acid test for cane sugar is preferred.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 263.

Rakshit, Jitendra Nath: Estimation of sucrose in the presence of lactose.—J. Ind. & Eng. Chem. 1914, v. 6, p. 307–308.

Feder, E.: The determination of milk sugar in milk by means of the polariscope.—Ztschr. unters. Nahr. u. Genussm. 1914, v. 28, p. 20–29.

Thoms, H.: A study of some lactose formaldehyde combinations and the patents claimed on the production from these compounds.—Arb. Pharm. Inst. Univ. Berl. 1914, p. 210–234.

Rosemann, R.: The influence of ammonium sulphate on the specific rotatory power of milk sugar.—Ztschr. physiol. Chem. 1914, v. 89, p. 133–140.

Mayer, Joseph L.: The ash content of 15 samples of milk sugar varied from 0.17 to 0.24 per cent.—Proc. New York Pharm. Assoc. 1914, p. 115.

Panzer, Theodor: The occurrence of a diastatic substance in milk sugar.—Ztschr. physiol. Chem. 1914, v. 93, p. 316–336.

Haskell, Chas. C.: The comparative value of various sugars in the feeding of infants.—Lilly Sci. Bull. 1914, Ser. 1, p. 136–150.

Hoffmann ,Ernst: The tolerance to galactose in the normal and during the menstruation. Report of experimental work.—Ztschr. exper. Path. u. Therap. 1914, v. 16, p. 337–364.

SAFROLUM.

Schimmel & Co.: Our output of safrol, which runs into hundreds of thousands of kilos has continued to be in brisk demand.—Semi-Ann. Rep. April, 1914, p. 118.

Jensen, H. R.: Seven samples of the best commercial safrol gave: Specific gravity, 1.1015 to 1.105; refractive index, 1.5366 to 1.5386; optical rotation, 0°.—Evans's An. Notes, 1914, p. 59.

Mann, E. W.: Four specimens of this phenol ether gave: Specific gravity, from 1.102 to 1.105; optical rotation, from +0.25° to −0.25°; refractive index, from 1.5373 to 1.5392.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 39.

Albright, Alan R.: The hydrogen number of safrol was found to be 135.6; the per cent of active constituent, 100.—J. Am. Chem. Soc. 1914, v. 36, p. 2202.

Albright, Alan R.: The reduction of safrol in determining the hydrogen number of some essential oils and essential oil products.—J. Am. Chem. Soc. 1914, v. 36, p. 2195.

Foulds and Robinson: Some derivatives of safrol.—J. Chem. Soc. Lond. 1914, v. 105, p. 1963–1972.

SALTS.

Amos, W. S.: The granulated salts appear to be somewhat out of line with those in common demand.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

Alsberg, C. L.: Opinion regarding the labeling of mineral water salts for medicinal use.—S. R. A.-Chem. 1914, p. 3–4.

SALICINUM.

Anon.: An illustrated description of *Salix alba.*—Chem. & Drug. 1914, v. 84, p. 442.

Anon.: The use of the willow, now of so much importance as the source of salicin, in medicine.—Nat. Druggist, 1914, v. 44, p. 514.

E'we, G. E.: One lot of salicin left a residue of 0.1 per cent on ignition, was slightly pinkish yellow in color, but otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 155.

Jensen, H. R.: Three samples of salicin of normal purity were found to melt from 197° to 200°.—Evans' An. Notes, 1914, p. 59.

Kebler, L. F.: Outline of method for the determination of salicin in compound tablets containing ammonium salicylate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1086.

SALVIA.

Hommell, P. E.: The nature and composition of the leaves of *Salvia officinalis* and some of the pharmaceutical uses to which they have been put.—Proc. New Jersey Pharm. Assoc. 1914, p. 75–78.

Lefeldt, M.: The Ph. Germ. V. should require that sage leaves have a characteristic odor.—Pharm. Ztg. 1914, v. 59, p. 42.

J. D. Riedel, A.-G.: Salvia contained from 5.6 to 8.3 per cent of ash and from 30 to 35.3 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

SANGUINARIA.

U. S. P. IX: The dried rhizome and roots of *Sanguinaria canadensis*. Description elaborated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 399, and Abstr. Prop. Changes, Part 2, 1914, p. 41.

Hankey, William T.: One lot of whole bloodroot showing a white fracture was rejected.—Proc. Ohio Pharm. Assoc. 1914, p. 54.

Maines, E. L.: Bloodroot was found to contain from 5.27 to 7.42 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Vanderkleed, C. E.: Report of 11 assays of sanguinaria; from 3.28 to 6.84 per cent alkaloids; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Scoville, W. L.: Five lots of bloodroot yielded from 4.1 to 6 per cent ether soluble alkaloids.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

Orrick, W. H.: Sanguinarine nitrate continues to test very low. Four lots examined during the year assayed 20.8, 61.1, 47, and 44.3 per cent, respectively, of pure sanguinarine nitrate.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 155.

Ramsay, C. F.: In making fluid extract of sanguinaria, the best results were obtained by using 71 per cent alcohol, with about 2 per cent of hydrochloric acid, and having the drug coarsely powdered.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1648.

U. S. P. IX: For tincture of sanguinaria 10 cc. of hydrochloric acid replaces the 20 cc. of acetic acid.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1577, and Abstr. Prop. Changes, Part 6, 1914, p. 15.

Editorial: American sanguinaria, or bloodroot, is a tonic and stimulant to the bronchial membranes, much neglected because it has been given in too large doses.—Phys. Drug. News, 1914, v. 9, p. 363.

SANTALUM RUBRUM.

Maines, E. L.: Red saunders was found to contain from 1.04 to 1.15 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Cain, Simonsen, and Smith: Researches on santalin.—Proc. Chem. Soc. 1914, v. 30, p. 132; also J. Chem. Soc. Lond. 1914, v. 105, p. 1335–1342.

SANTONICA.

Gehe & Co.: Table showing the variations in the price of santonica during the years 1888–1913, inclusive.—Handelsbericht, 1914, p. 158–159.

Westling, R.: A pharmacognostic discussion of santonica.—Svensk farm. Tidskr. 1914, v. 18, p. 297–300.

Van Os, D.: Observations on santonin-free santonica, including a review of some of the recent publications on the subject.—Pharm. Weekblad, 1914, v. 51, p. 1154–1156; also Apoth.-Ztg. 1914, v. 29, p. 867; Pharm. Zentralh. 1914, v. 55, p. 208–209, and J. Am. Pharm. Assoc. 1914, v. 3, p. 1289.

Caesar & Loretz: The presence of plant hairs at the base of the involucrum of santonica is indicative of adulteration. The genuine flowering bud is devoid of such hair.—Jahres-Ber. 1914, p. 24; also Pharm. Zentralh. 1914, v. 55, p. 518.

Gehe & Co.: The increase in the occurrence of santonin-free santonica makes the detection of this adulterant a matter of importance. The localization of santonin by means of the microscope is described as an efficient test.—Südd. Apoth.-Ztg. 1914, v. 54, p. 239.

Caspari, Charles E.: Tons of spurious santonica are being used all over the country, especially for stock powders, which are absolutely worthless.—J. Am. Pharm. Assoc. 1914, v. 3, p. 637.

Eldred, F. R.: Of 10 samples of santonica examined, 9 showed no trace of santonin whatever.—J. Am. Pharm. Assoc. 1914, v. 3, p. 637.

Caesar & Loretz: Six samples of true santonica contained from 1.32 to 2.73 per cent of santonin.—Jahres-Ber. 1914, p. 38.

J. D. Riedel, A.-G.: Santonica contained from 7.1 to 9.4 per cent of ash and from 13.2 to 15.3 per cent of extract soluble in ether.—Riedel's Berichte, 1914, p. 31.

Rippetoe, J. R.: Three samples of santonica were found to contain from 22.30 to 25.10 per cent of alcohol extract and from 8.50 to 10.25 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 442.

Fernau, Albert: A method for the determination of santonin in santonica should be included in the Ph. Austr.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 253.

Caesar & Loretz: The Katz-Fromme method of assay for santonica.—Jahres-Ber. 1914, p. 79–81.

Caspari, Charles E.: Determination of santonin in santonica. The method of Fromme is superior to that of either Thaeter or Katz.—J. Am. Pharm. Assoc. 1914, v. 3, p. 634–637.

SANTONINUM.

Editorial: The study of santonin. A review of the economic conditions and the fluctuations in the price of the product.—Brit. & Col. Drug. 1914, v. 65, p. 17–18. See also: Pharm. J. 1914, v. 93, p. 2.

Lowe, Clement B.: The large quantities of crude santonin which are being imported into this country suggest the possibility that santonin-free santonica may have been treated in some way for the production of this crude santonin.—J. Am. Pharm. Assoc. 1914, v. 3, p. 637.

Jensen, H. R.: Twenty-four samples of santonin tested were all practically pure, the melting points being almost uniform, viz. 170.5° to 171.5°.—Evans' An. Notes, 1914, p. 60.

Mann, E. W.: Fifteen samples of santonin tested have all proved satisfactory, melting points observed ranging from 168° to 172°.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 47.

Caspari, Charles E.: Determination of santonin in santonica. The method of Fromme is recommended.—J. Am. Pharm. Assoc. 1914, v. 3, p. 634–637.

Rupp, E.: Modified method for the determination of santonin in pastilles.—Südd. Apoth.-Ztg. 1914, v. 54, p. 322, and Apoth.-Ztg. 1914, v. 29, p. 723.

Gusmano, G.: The oxidation of santonin by means of organic peroxides.—Rend. soc. chim. ital. 1914, v. 6, p. 1.

Anon.: A note on the pharmacologic properties of two santonin derivatives, alpha and beta santonan.—Pharm. Zentralh. 1914, v. 55, p. 846.

Magri, E.: Fatal case of santonin poisoning. A boy of 7.—(Gazz. degli Ospedali et delle Cliniche, 1914, v. 35, No. 16) J. Am. M. Assoc. 1914, v. 62, p. 892.

Editorial: Death is frequently reported from comparatively small doses of santonin. One grain, for children 7 years old, repeated each day for five or six days, is about the maximum to be used with safety.—Ellingwood's Therap. 1914, v. 8, p. 236.

SAPO.

Thurston, Azor: Castile soap as a synonym for Sapo, U. S. P. A ruling to this effect would be desirable.—Drug. Circ. 1914, v. 58, p. 331–332.

Editorial: The list of soap-using countries is headed by the United Kingdom with 21 pounds to the individual. The United States comes next, and Russia is last with 2 pounds of soap per annum for each individual.—Am. Perf. 1914, v. 9, p. 130.

Thomssen, E. G.: The soap-making industry. Continued from v. 8.—Am. Perf. 1914, v. 9, p. 9–11, 48–50, 76–77. 112–113, 137–138, 165–166, 193–194, 215–216, 243–244, 272–273, 297–298, 324–325.

Holde, D.: The soap, glycerin, and oil industry in the United States.—J. Ind. & Eng. Chem. 1914, v. 6, p. 45.

Anon.: A book review describes a volume on medicinal soaps, their production and uses, by Walter Schrauth.—J. Soc. Chem. Ind. 1914, v. 33, p. 378.

Herbig, W.: Progress in the chemistry of soap and its manufacture.—Chem. Rev. Fett u. Harz Ind. 1914, v. 21, p. 213.

Mann, E. W.: Much of the hard soap offered is prepared from fats other than olive oil.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 48.

Noyes, C. R.: The castile soap you buy is manufactured from a compound of olive oil and may contain a large quantity of water unless you order "Soap, U. S. P."—J. Am. Pharm. Assoc. 1914, v. 3, p. 853; also Proc. Minnesota Pharm. Assoc. 1914, p. 189.

Besson, A. A.: The determination of the fatty acid content of soaps.—Chem.-Ztg. 1914. v. 38, p. 645–647, 686–687. See also Rupp, E.: Apoth.-Ztg. 1914, v. 29, p. 724.

Bosshard and Huggenberg: The determination of free alkalies in soaps.—Apoth.-Ztg. 1914, v. 29, p. 102–103.

E'we, G. E.: The amount of moisture in five lots of castile soap examined was much less in each than the 36 per cent allowed by the U. S. P. The samples ranged from 12.6 to 22.3 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 156.

Jensen, H. R.: Eighteen samples of white castile soap in which foreign oils were not detected contained from 22.2 to 28.4 per cent of water and melted at from 22° to 27°.—Evans' An. Notes, 1914, p. 64.

Mayer, Joseph L.: Of 12 samples of castile soap 11 were found to be genuine.—Proc. New York Pharm. Assoc. 1914, p. 115.

E'we, G. E.: All samples of powdered castile soap examined were free from animal fats.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 156.

Linke, H.: The commercial samples of soap do not comply with the phenolphthalein test of the Ph. Germ. V.—Apoth.-Ztg. 1914, v. 29, p. 694.

Bosshard and Huggenberg: The determination of free alkali in soaps.—Ztschr. ang. Chem. 1914, v. 27, p. 456. See also Schweiz. Apoth.-Ztg. 1914, v. 52, p. 597–598.

Dück: A sample of soap was found to have a dark yellowish color and a rancid odor.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 235.

Bunbury and Martin: Studies on the constitution of soap solutions.—J. Chem. Soc. Lond. 1914, v. 105, p. 417–435. See also McBain and Martin, p. 957–977, and Proc. Chem. Soc. 1914, v. 30, p. 8 and p. 68.

For additional references on soap see Chem. Abstr.; Chem. Zentralbl.; J. Chem. Soc. Lond.; J. Soc. Chem. Ind.

SAPO MOLLIS.

U. S. P. IX: Slight changes in the directions for making.—J. Am. Pharm. Assoc. 1914, v. 3, p. 550, and Abstr. Prop. Changes, Part 3, 1914, p. 27.

Roberts, J. G.: The total fatty acids of three samples of soft soap ranged from 30.98 to 46.49 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 156.

Rupp, E.: Modified method for the determination of the fatty acid content of soft soap. The Ph. Germ. V. method gives only approximate values.—Südd. Apoth.-Ztg. 1914, v. 54, p. 322.

Mann, E. W.: The majority of the soft soaps examined have given results in accordance with their description as olive oil soaps.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 48. See also Jensen, H. R.: Evans' An. Notes, 1914, p. 64.

Koch, F.: Systematic inunctions with green soap.—Therap. Monatsh. 1914, v. 28, p. 661–663. See also abstract: J. Am. M. Assoc. 1914, v. 63, p. 1989.

SARSAPARILLA.

U. S. P. IX: Mexican, Honduras, Para, and Jamaica sarsaparilla described separately. Ash not exceeding 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 400, and Abstr. Prop. Changes, Part 2, 1914, p. 42.

Editorial: Sarsaparilla does not commend itself to the Oxford Street savants, who desire to relegate it to the limbo of ex-official things.—Chem. & Drug. 1914, v. 84, p. 566.

Editorial: Sarsaparilla could be eliminated from the drug trade of the world without serious inconvenience, as far as the practice of therapeutics is concerned.—Meyer Bros. Drug. 1914, v. 35, p. 130.

Gehe & Co.: Both Honduras and Vera Cruz sarsaparilla have been exceptionally scarce.—Handelsbericht, 1914, p. 111.

Power and Salway: Chemical examination of sarsaparilla root.—J. Chem. Soc. Lond. 1914, v. 105, p. 201–219.

Rippetoe, J. R.: Two samples of sarsaparilla were found to contain 17.90 and 15.75 per cent of alcohol (32 per cent) extract and 12.60 and 13.99 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 442.

J. D. Riedel, A. G.: Sarsaparilla contained from 3.6 to 6.9 per cent of ash and from 19.3 to 28.1 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 33.

Tunmann, O.: Some remarks on the occurrence of crystals in the sarsaparillas and some observations on Vera Cruz sarsaparilla.—Pharm. Zentralh. 1914, v. 55, p. 143–146.

E'we and Vanderkleed: Precipitation of glucoside from fluid extract of sarsaparilla, U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 275.

U. S. P. IX: Fluid extract of sarsaparilla to be made from No. 20 powder and diluted alcohol to be used as a menstruum.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes, Part 3, 1914, p. 20.

U. S. P. IX: Compound fluid extract of sarsaparilla to be made from the drug in No. 20 powder. The first menstruum to consist of a mixture of glycerin 100 cc., alcohol 500 cc., and water 400 cc.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes, Part 3, 1914, p. 20.

Xrayser II: Sarsaparilla, though it has been official in this country for nearly three centuries, has always been regarded by some practitioners as of little or no value.—Chem. & Drug. 1914, v. 85, p. 517.

Turner, T. E.: The value of sarsaparilla is doubtful to therapeutists, possibly because empiric, but it must be of some use or the employment would not be so universal, both in and out of pharmacy.—Chem. & Drug. Australas. 1914, v. 24, p. 429.

Alsberg and Smith: Studies upon the long-continued feeding of saponin.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 517.

SASSAFRAS.

U. S. P. IX: The drug may include not more than 2 per cent of adhering wood. Ash not exceeding 30 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 401, and Abstr. Prop. Changes, Part 2, 1914, p. 43.

Rippetoe, J. R.: Six samples of sassafras were found to contain from 13.06 to 33.75 per cent of alcohol (70 per cent) extract and from 12.92 to 40.57 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 412.

J. D. Riedel, A.-G.: Sassafras contained from 0.9 to 2.1 per cent of ash and from 6.8 to 10.7 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Maines, E. L.: Sassafras bark was found to contain 11.93 and 43.93 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Turner, T. E.: Sassafras is omitted from the Ph. Brit. V. This is a mistake, as we want all the aromatics possible.—Chem. & Drug. Australas. 1914, v. 24, p. 429.

SCAMMONIUM.

U. S. P. IX: The dried root of *Convolvulus scammonia* yielding when assayed by the official process not less than 8 per cent of total resins of scammony root.—J. Am. Pharm. Assoc. 1914, v. 3, p. 402, and Abstr. Prop. Changes, Part 2, 1914, p. 44.

J. D. Riedel, A.-G.: Scammony root contained from 1.4 to 4 per cent of ash and from 22.2 to 26 per cent of extract soluble in water and from 32 to 39.3 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 33.

Mann, E. W.: Curious results were obtained not only for two samples of "Aleppo" scammony, but also for two of so-called "Virg." We are glad to note that this unsatisfactory drug no longer receives official recognition.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 22.

Jensen, H. R.: Four samples of "Virgin" gum were found to contain 72, 74, 74.5, and 85 per cent of resin.—Evans' An. Notes, 1914, p. 60.

SCILLA.

U. S. P. IX: The fleshy, inner scales of the bulb of the white variety cut into pieces and carefully dried. Ash not exceeding 8 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 402, and Abstr. Prop. Changes, Part 2, 1914, p. 44.

Editorial: Squill thrives exceedingly well in California. It is easily cultivated.—Pacific Pharm. 1914, v. 7, p. 297.

Rippetoe, J. R.: One sample of squill was found to contain 79.05 per cent of water extract and 2.40 per cent of ash. Acetic acid extract, 70.25 per cent.—Am. J. Pharm. 1914, v. 86, p. 443.

Maines, E. L.: Squill was found to contain from 2.29 to 6.98 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

J. D. Riedel, A.-G.: Squill contained from 1.8 to 4.2 per cent of ash, from 81 to 84.5 per cent extract soluble in water, and from 70.2 to 79.7 per cent extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 31.

Mann, E. W.: Three samples of the dry powder of squill yielded 3, 4.44, and 2.99 per cent, respectively, of ash (Ph. Brit. maximum 5 per cent).—Ann. Rep. Southall Bros. & Barclay, 1914, p. 23.

Kopaczewski, W.: Researches on the composition of squill. The toxic principle scillitin, a glucoside.—Compt. rend. Acad. sc. 1914, v. 158, p. 1520–1522.

U. S. IX: The fluid extract of squill to be made by extracting the drug with a mixture of alcohol 2 and water 1.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1570, and Abstr. Prop. Changes, Part 6, 1914, p. 8.

Hamilton, H. C.: A mistake was certainly made in adopting for the preparation of fluid extract of squill, U. S. P. VIII, a menstruum composed of a 10 per cent solution of acetic acid.—Am. J. Pharm. 1914, v. 86, p. 56–61.

U. S. P. IX: The tincture of squill to be prepared by percolation.—J. Am. Pharm. Assoc. 1914, v. 3, p. 547, and Abstr. Prop. Changes, Part 3, 1914, p. 24.

Kopaczewski, W.: Observations on physiological action of scillitin and scillidiuretin.—Biochem. Ztschr. 1914, v. 66, p. 501–508. See also abstract: Therap. Monatsh. 1914, v. 28, p. 760.

Danysz and Kopaczewski: On the toxic properties of the active principle of squill, with report of animal experiments with rats, guinea pigs, rabbits, cats, and dogs.—Compt. rend. Soc. biol. 1914, v. 77, p. 59–61.

Editorial: Squill as a remedy is said to be especially valuable for old people who have chronic bronchitis and scanty urine.—Ellingwood's Therap. 1914, v. 8, p. 193.

SCOPARIUS.

Anon.: An illustrated description of *Cytisus scoparius*.—Chem. & Drug. 1914, v. 85, p. 34.

Rippetoe, J. R.: One sample of scoparius was found to contain 24.10 per cent of alcohol (49 per cent) extract and 2.95 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 442.

SCOPOLAMINÆ HYDROBROMIDUM.

U. S. P. IX: Hyoscine hydrobromide added as a synonym. Description modified. Test for foreign alkaloids, apoatropine, carbonizable impurities, and morphine added. The platinic chloride test is omitted.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1574, and Abstr. Prop. Changes, Part 6, 1914, p. 12.

Du Mez, A. G.: On the origin and usage of the terms "hyoscine" and "scopolamine." A criticism of the U. S. P.—Am. J. Pharm. 1914, v. 86, p. 339–349.

Straub, W.: Process for preparing stable scopolamine solutions. German Patent 266,415, May 29, 1913. Scopolamine solutions may be rendered stable by addition of a high molecular polyhydric alcohol.—J. Soc. Chem. Ind. 1914, v. 33, p. 42, and Schweiz. Apoth.-Ztg. 1914, v. 52, p. 340. See also Beck: Münch. med. Wchnschr. 1914, v. 61, p. 129–130. and Langer, H.: Pharm. J. 1914, v. 93, p. 147.

Sudler, Mervin Tubman: Case of poisoning by scopolamine (hyoscine) hypobromate.—J. Am. M. Assoc. 1914, v. 62, p. 1963.

Abré, Albert: A study of the curarelike action of scopolamine.—J. physiol. et pathol. gén. 1914, v. 16, p. 655–670.

Editorial: The dangers of twilight anesthesia.—New York M. J. 1914, v. 100, p. 284–285.

Rongy and Arluck: The use of scopolamine-morphine in labor. A preliminary report based upon a study of 100 cases, with a detailed report of every tenth case.—New York M. J. 1914, v. 100, p. 619–621. See also Editorial, p. 629–630, and Merck's Arch. 1914, v. 16, p. 308–311.

Heller, Jacob: A study of 150 cases of twilight sleep.—Med. Rec. 1914, v. 86, p. 797–799.

Editorial: Unbiased opinion seems to be that the routine use of scopolamine-morphine injection in general medical work would increase the dangers to both the mother and child.—Hahnemann. Month. 1914, v. 49, p. 946–947.

SENEGA.

U. S. P. IX: The roots may include not more than 5 per cent of stems and other foreign matter. Description elaborated. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 403, and Abstr. Prop. Changes, Part 2, 1914, p. 45.

Gehe & Co.: Senega root continues to be scarce.—Handelsbericht, 1914, p. 112.

Rippetoe, J. R.: Five samples of senega were found to contain from 30.56 to 37.96 per cent of alcohol (63 per cent) extract and from 3.98 to 6.74 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 442.

Maines, E. L.: Senega root was found to contain from 5.04 to 6.97 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

J. D. Riedel, A.-G.: Senega contained from 2.6 to 5.7 per cent of ash and from 37.2 to 43 per cent of extract soluble in water and from 35 to 40.8 per cent of extract soluble in a mixture of 2 parts of alcohol and 3 parts of water.—Riedel's Berichte, 1914, p. 33.

U. S. P. IX: Fluid extract to be made from No. 30 powder and a mixture of alcohol 2 volumes and water 1 volume to be used as a menstruum.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes, Part 3, 1914, p. 20.

SENNA.

U. S. P. IX: The drug may include not more than 10 per cent of stem tissues, pods, seeds, and other impurities. Alexandria senna and India senna described separately. Ash not exceeding 12 per cent. Ash insoluble in hydrochloric acid not exceeding 3 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 404, and Abstr. Prop. Changes, Part 2, 1914, p. 46.

Lefeldt, M.: The Ph. Germ. V should require that senna leaves have a characteristic odor and a sweetish subsequently bitter and irritating taste.—Pharm. Ztg. 1914, v. 49, p. 42.

Gehe & Co.: The market for senna is gradually changing, and America now imports much of this drug direct from the eastern countries.—Handelsbericht, 1914, p. 76.

Garrels, Arthur: The senna exported from Egypt is gathered from shrubs growing wild in the Anglo-Egyptian Sudan and the Red Sea districts of Arabia.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 61. See also J. Am. M. Assoc. 1914, v. 63, p. 1007.

Baker, Henry D.: The Tinnevelly senna (*Cassia angustifolia*) of Indian commerce, which was introduced to both Indian and European pharmacy from Arabia, is extensively produced in the extreme south of the Indian Peninsula, near the towns of Tinnevelly, Madura, andTrichinopoly.—Oil, Paint & Drug Rep. 1914, v. 85, February 16, p. 38.

Editorial: There is a large and constant demand for senna, and this important article is very generally of inferior grade or highly adulterated.—Pacific Pharm. 1914, v. 7, p. 297.

Kebler, L. F.: Senna siftings as formerly sent to this country contained almost anything one might want to mention. At the present time the ash is not allowed to exceed 14 per cent, and this may be reduced still further in time.—Proc. Kentucky Pharm. Assoc. 1914, p. 129.

Rippetoe, J. R.: Five samples of Alexandria senna were found to contain from 12.60 to 31.72 per cent of alcohol (49 per cent) extract, 27.39 to 31.10 per cent of water extract, and 9 to 20.40 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 442–443.

Maines, E. L.: Senna was found to contain from 9.06 to 12.62 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Mann, E. W.: Ash yield for several specimens of the powdered senna ranged from 8.43 to 9.43 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 22.

Linke, H.: Seven samples of senna gave from 8.75 to 14.20 per cent of ash. Four of the samples exceeded the maximum of 12 per cent of the Ph. Germ. V.—Apoth.-Ztg. 1914, v. 29, p. 540.

Caesar & Loretz: Four samples of Tinnevelly senna contained from 10.3 to 15.82 per cent of ash.—Jahres-Ber. 1914, p. 38.

J. D. Riedel, A.-G.: Tinnevelly senna contained from 8.9 to 11.7 per cent of ash and from 39.8 to 48.5 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

Warren, L. E.: The detection of emodin-bearing drugs in presence of phenolphthalein.—Am. J. Pharm. 1914, v. 86, p. 444–449, and Rep. Chem. Lab. Am. M. Assoc. 1914, v. 7, p. 19–24.

Bailey, E. Monroe: Some reactions of chrysophanic acid with reference to its detection in complex medicinal preparations.—J. Ind. & Eng. Chem. 1914, v. 6, p. 320–321.

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U. S. P. IX: Rubric for solution of sodium arsenate to read not less than 0.975, nor more than 1.025 per cent of anhydrous sodium arsenate. Method of assay modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 532, and Abstr. Prop. Changes, Part 3, 1914, p. 9.

Becker, I. A.: The rubric for solution of sodium arsenate states "not less than 0.975 per cent, nor more than 1.025 per cent," but the assay requires "not less than 0.95 per cent, nor more than 1 per cent," a discrepancy that ought to be corrected.—Nat Druggist, 1914, v. 44, p. 419.

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E'we, G. E.: One sample of sodium bicarbonate, reagent, examined contained traces of broken amber glass. This occurrence again emphasizes the need for pharmacists to watch their bottles carefully for slivers and glass blisters that may be the cause of such occurrences.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 157.

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Linke, H.: Commerical borax does not always comply with the Ph. Germ. V. requirements with respect to sodium borate.—Apoth.-Ztg. 1914, v. 29, p. 674.

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Mann, E. W.: Practically all the samples of borax examined were within the 5 parts per million of arsenic fixed as maximum for the salt now officially described as Borax Purificatus.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 44.

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Jensen, H. R.: Twenty-seven samples of sodium bromide contained 99 to 100 per cent (average 99.5), this variation being almost entirely due to its hygroscopic character.—Evans' An. Notes, 1914, p. 64.

Hill, C. A.: Of four samples of sodium bromide examined during the years 1910, 1911, and 1913, the chloride content calculated as sodium chloride varied from 0 to 1.25 per cent.—Chem. & Drug. 1914, v. 85, p. 19.

Finnemore, Horace: The incompatibility of sodium nitrite and ammonium bromide is due to the formation of ammonium nitrite by double decomposition. This product decomposes into water and nitrogen, the latter being responsible for the occasional bursting of the container.—Brit. M. J. 1914, v. 1, p. 790–791.

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Anon.: While sodium cacodylate has not been used to a sufficient extent to determine its value in the treatment of syphilis, the available evidence seems to be that it is of service but not an agent to be relied on alone. Its action, while not so rapid, is not unlike that of salvarsan.—J. Am. M. Assoc. 1914, v. 62, p. 476. See also v. 63, p. 1223.

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Clark, A. H.: Report on 12 samples of sodium carbonate, which were found to vary from 73.28 to 99.48 per cent of anhydrous sodium carbonate. Sodium carbonate sold as monohydrate is not always what it is claimed to be.—Drug. Circ. 1914, v. 59, p. 456–457.

Ewe, G. E.: One lot of sodium carbonate, monohydrated, examined was contaminated with an unidentified substance which caused the sodium carbonate to give pink solutions.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 157.

Hill, C. A.: Of 138 samples of sodium carbonate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 30 parts per million. The arsenic content varied from 0 to 0.8 parts per million.—Chem. & Drug. 1914, v. 85, p. 23.

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English and Turner: The action of steam on sodium chloride.—Proc. Chem. Soc. 1914, v. 30, p. 162.

Siboni, G.: The preparation of isotonic solutions.—Boll. chim.-farm. 1914, v. 53, p. 729–731.

U. S. P. IX: To require for "saline solution" 8.5 gm. sodium chloride in distilled water sufficient to make 1.000 cc. To be sterilized under pressure for 15 minutes or by boiling for at least 1 hour. Solutions should be freshly prepared.—J. Am. Pharm. Assoc. 1914, v. 3, p. 532, and Abstr. Prop. Changes, 1914, Part 3, p. 9.

Becker, I. A.: The use of 8.5 gm. of sodium chloride per liter seems a rather large amount.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1024, and Nat. Druggist, 1914, v. 44, p. 419.

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Greenwald, Isidor: The administration of sodium citrate to phlorhizinized dogs and to a patient with diabetes mellitus was followed by an increased excretion of glucose, indicating the conversion of the six carbon atoms of citric acid into glucose.—J. Biol. Chem. 1914, v. 18, p. 115–121.

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Beringer. George M.: A proposed monograph for sodium formate. It should contain when dried not less than 98 per cent of anhydrous sodium formate.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1600.

SODII HYDROXIDUM.

Schutz. E.: Manufacture of caustic alkalies from alkali carbonates. German Patent 272,790, April 19, 1913.—J. Soc. Chem. Ind. 1914, v. 33, p. 692.

Ewe, G. E.: One sample of electrolytic sodium hydroxide was distinctly blue in color, but gave colorless solution.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 157.

Stockinger and Vanderkleed: One sample of sodium hydroxide reagent examined contained 0.864 per cent of sodium chloride.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 157.

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SODII HYPOPHOSPHIS.

E'we, G. E.: One lot of sodium hypophosphite examined tested only 96.6 per cent instead of 98 per cent, required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 157.

Hill, C. A.: Of 22 samples of sodium hypophosphite examined during 1912 and 1913, the lead content varied from 2 to 18 parts per million. The arsenic content varied from 0 to 7.5 parts per million.—Chem. & Drug. 1914, v. 85, p. 22.

SODII IODIDUM.

Jensen, H. R.: Eight samples of sodium iodide were estimated to contain 99.2 to 99.6 per cent of pure salt (average 99.4 per cent).—Evans' An. Notes, 1914, p. 64.

E'we, G. E.: Of two lots examined, one tested only 92.9 per cent of NaI, instead of the 98 per cent required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 157.

Stüwe, E.: A direct iodometric method for the determination of soluble iodides.—Apoth.-Ztg. 1914, v. 29, p. 382.

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Mann, E. W.: Some difficulty has been experienced in obtaining sodium nitrite sufficiently free from lead, 35 and 44 parts per million being found in two instances.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 48.

Hill, C. A.: Of seven samples of sodium nitrite examined during 1911 and 1912 the lead content varied from 0 to 40 parts per million. The arsenic content varied from 0.2 to 0.4 part per million.—Chem. & Drug. 1914, v. 85, p. 23.

Rupp, E.: Outline of method of assay for sodium nitrite.—Apoth.-Ztg. 1914, v. 29, p. 724, and Südd. Apoth.-Ztg. 1914, v. 54, p. 322.

Harnack, Erich: Poisoning from the internal administration of nitrites.—Vrtljschr. ger. Med. 1914, v. 47, p. 257-264.

Macht, D. I.: Action of the nitrites on the isolated surviving pulmonary artery.—J. Am. M. Assoc. 1914, v. 62, p. 524. See also J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 23.

SODII NITRAS.

Ross, William H.: The origin of nitrate deposits. A popular review.—Pop. Sci. Month. 1914, v. 85, p. 134–145.

Anon.: A description of the method employed in producing Chile saltpeter.—Südd. Apoth.-Ztg. 1914, v. 54, p. 53.

Editorial: A review of the economical conditions of the sodium nitrate market, with a table showing the quantities and monthly production for 1912–13.—Oil, Paint & Drug. Rep. 1914, v. 85, January 12, p. 9.

SODIUM PERBORATE.

Philipp, Herbert: A review of the chemistry of sodium perborate.—Pharm. Era, 1914, v. 47, p. 103.

Wagner, Hans: Perborates may be produced by combining borax or other sodium salt of boric acid with sodium peroxide.—Südd. Apoth.-Ztg. 1914, v. 54, p. 627.

SODII PHOSPHAS.

Jensen, H. R.: Two samples of acid sodium phosphate each contained 94.5 per cent of pure sodium phosphate.—Evans's An. Notes, 1914, p. 65.

Scoville, W. L.: Sodium phosphate should be watched carefully for excess of arsenic. Two lots were rejected for this reason.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1289.

Hill, C. A.: Of 347 samples of sodium phosphate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 8 parts per million. The arsenic content varied from 0 to 1.6 parts per million.—Chem. & Drug. 1914, v. 85, p. 23.

Umney and Bennett: Commercial standards for sodium phosphate.—Brit. & Col. Drug. 1914, v. 66, p. 71; also Pharm. J. 1914, v. 92, p. 135–136.

Ewe, G. E.: Dried sodium phosphate varies greatly in moisture. Three lots contained 0.4, 2.6, and 12 per cent of moisture, respectively.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 158.

Umney and Bennett: Ten samples of dried sodium phosphate were found to contain from 0.5 to 31.3 per cent of moisture. Five per cent would be a reasonable limit.—Pharm. J. 1914, v. 93, p. 136, and Year-Book of Pharmacy, 1914, p. 409.

Thurston, Azor: Six samples of granular effervescent sodium phosphate on examination were found to contain from 2.70 to 21.98 per cent of anhydrous sodium phosphate in place of 20 per cent required by the Pharmacopœia.—Proc. Ohio Pharm. Asoc. 1914, p. 42, and Midl. Drug. 1914, v. 48, p. 362.

Roller, Emil: A formula for an effervescent solution of citro-phosphate of soda as a substitute for citrate of magnesia.—Drug. Circ. 1914, v. 57, p. 684.

SODII SALICYLAS.

Linke, H.: In applying the test for chlorides in sodium salicylate care must be exercised to use a sufficient amount of nitric acid.—Apoth.-Ztg. 1914, v. 29, p. 694.

Bohrisch, P.: The Ph. Germ. V test for chloride in sodium salicylate should be changed.—Pharm. Zentralh. 1914, v. 55, p. 909, and Apoth.-Ztg. 1914, v. 29, p. 902.

Astre, Ch.: The analysis of official sodium salicylate. The residue from each gm. of the substance varied from 0.325 to 0.331 gm. of sodium carbonate.—Bull. pharm. sud-est, 1914, v. 19, p. 33–34.

Beckers, Wilhelm: A sample of powdered sodium salicylate, partially insoluble, was found to be contaminated with aluminum, calcium, and silicic acid, evidently from carelessness in the powdering.—Südd. Apoth.-Ztg. 1914, v. 54, p. 254–255.

E'we, G. E.: Of four lots of sodium salicylate examined, only one met the U. S. P. requirement of 99.5 per cent.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 158.

Jensen, H. R.: Twenty-eight samples of sodium salicylate were of 99.3 to 99.9 per cent purity, with free acid 0.03 to 0.13 per cent (average 0.07 per cent).—Evans's An. Notes, 1914, p. 65.

Strode, Sylvanus E.: Of three samples of sodium salicylate from oil of wintergreen examined, one was not passed.—Rep. Ohio D. & F. Div. 1914, p. 120.

Hill, C. A.: Of 41 samples of sodium salicylate examined during the years 1911 to 1913, inclusive, the lead content varied from 2 to 24 parts per million. The arsenic content varied from 0 to 2 parts per million.—Chem. & Drug. 1914, v. 85, p. 23.

Jones, H. W.: The assay of medicinal tablets containing salicylates.—Am. Druggist, 1914, v. 62, p. 369.

Howard, Charles D.: Of eight samples of sodium salicylate tablets, one was found deficient, containing 83 per cent of the claimed amount.—Bull. New Hampshire Bd. Health, 1914, v. 3, p. 56.

Brown, L. A.: Four samples of tablets of sodium salicylate analyzed; one passed, and three adulterated. Samples ranged in strength from 102.8 to 83.6 per cent of the declared strength.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Kebler, L. F.: Outline of method for the determination of sodium salicylate in compound tablets containing acetanilide.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1084.

Kochmann, M.: The objectionable characteristics of salicylic acid and of the soluble salicylates include taste, gastric irritation, auditory disturbances, renal irritation, and excessive perspiration.—Therap. Monatsh. 1914, v. 28, p. 652.

Hanzlik, Paul J.: The salicylates; a historical and critical review of the literature.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 131–189.

Miller, Joseph L.: The specific action of salicylates in acute articular rheumatism.—J. Am. M. Assoc. 1914, v. 63, p. 1107–1109, and Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 213–223.

Coleman, Warren: Sodium salicylate with double the amount of sodium bicarbonate and rather large doses gave prompt relief.—J. Am. M. Assoc. 1914, v. 63, p. 1110.

Editorial: Calls attention to some recently observed misleading exploitations of sodium salicylate.—J. Am. M. Assoc. 1914, v. 62, p. 55.

Conner, Lewis A.: Intravenous injections of sodium salicylate in the treatment of rheumatic affections.—Med. Rec. 1914, v. 85, p. 323–325. See also Seibert, A., p. 397–398.

Heyn, Louis G.: Intrarectal administration of sodium salicylate in acute rheumatic fever with satisfactory results.—J. Am. M. Assoc. 1914, v. 63, p. 1004–1005, and Critic and Guide, 1914, v. 17, p. 432.

Isenschmid, R.: Experimental observations on the action of sodium salicylate on body temperature of animals without thermo-regulation.—Arch. exper. Path. u. Pharmakol. 1914, v. 75, p. 10–32.

SODII SULPHAS.

Anon.: An illustrated description of Glauber's works, from a copy of the collected works of John Rudolph Glauber, who was the first to procure hydrochloric acid by the action of oil of vitriol on common salt.—Meyer Bros. Drug. 1914, v. 35, p. 144–145.

Richter, Ernst: A sample of sodium sulphate was found to contain sulphite.—Apoth.-Ztg. 1914, v. 29, p. 686.

Hill, C. A.: Of 1,709 samples of sodium sulphate examined during the years 1910 to 1913, inclusive, the lead content varied from 0 to 26 parts per million. The arsenic content varied from 0 to 20 parts per million.—Chem. & Drug. 1914, v. 85, p. 23.

Umney and Bennett: Sodium sulphate readily parts with its water at 100° and, on a small scale, the salt is practically anhydrous at the end of two hours, the loss being 55.7 to 55.9 per cent.—Pharm. J. 1914, v. 93, p. 136, and Year-Book of Pharmacy, 1914, p. 409.

Jensen, H. R.: One sample of the exsiccated salt was rejected, owing to the presence of 8 parts of arsenic per million.—Evans' An. Notes, 1914, p. 65.

Richter, Ernst: A sample of dried sodium sulphate was found to contain chlorine.—Apoth.-Ztg. 1914, v. 29, p. 211.

SODII SULPHIS.

Clark, A. H.: The recognition by the Pharmacopœia of crystalline sodium sulphite is a serious mistake. The Pharmacopœia should describe the anhydrous sodium sulphite.—Drug. Circ. 1914, v. 50, p. 367.

Anon.: With silver nitrate solution, pure sulphites give a snow-white precipitate which retains its color for a long time, even in daylight. In the presence of hyposulphite, the precipitate rapidly becomes colored, passing to black.—Merck's Rep. 1914, v. 23, p. 278.

Patch, E. L.: Reports that nine samples varied from 22 to 98.28 per cent of pure sodium sulphite.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1289.

Jensen, H. R.: The better qualities of sodium sulphite examined were found to contain 94 to 99.9 per cent of pure salt, whilst the purity of the commercial samples ranged from 90 to 97.6 per cent.—Evans' An. Notes, 1914, p. 65.

Hill, C. A.: Of 35 samples of sodium sulphite examined during the years 1910 to 1913, inclusive, the lead content varied from 1 to 12 parts per million. The arsenic content varied from 0 to 1.6 part per million.—Chem. & Drug. 1914, v. 85, p. 23.

Mann, E. W.: A specimen of sodium sulphite, exsiccated, proved to contain just 0.5 per cent of sodium sulphite, the remainder being mainly sulphate.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 49.

SODII THIOSULPHAS.

Bodnár, J.: A new and simple titrimetric method for the determination of thiosulphate; also in the presence of sulphate.—Ztschr. anal. Chem. 1914, v. 53, p. 37–41.

Vanino and Schinner: Observations on the action of various acids on sodium thiosulphate in the presence of formaldehyde.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 2562–2566.

Salkowski, E.: On the origin of thiosulphate occurring in the urine of rabbits.—Ztschr. physiol. Chem. 1914, v. 92, p. 89–103.

Burnett, J. A.: The purgative and antimalarial effect of sodium thiosulphate should be more generally known.—Phys. Drug News, 1914, v. 9, p. 116.

Dean, C. B.: I have depended on sodium hyposulphite to ward off smallpox not only among those who are unvaccinated, but those who have been successfully vaccinated.—Ellingwood's Therap. 1914, v. 8, p. 341.

SODIUM GLYCEROPHOSPHATE.

U. S. P. IX: Sodii glycerophosphas to contain not less than 66 per cent of anhydrous sodium glycerophosphate. It is very soluble in cold and hot water; nearly insoluble in alcohol. Tests for phosphates and limit of alcohol-soluble impurities added also method of assay.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1575, and Abstr. Prop. Changes, Part 6, 1914, p. 13.

Anon.: The second supplement to the Ph. Ndl. IV describes sodium glycerophosphate as occurring in white, odorless crystals.—Pharm. Post, 1914, v. 47, p. 125. See also: Pharm. Weekblad, 1914, v. 51, p. 77–78.

Umney and Bennett: The crystalline form of sodium glycerophosphate contains 5 molecules of water. Solutions should be required to contain 75 per cent or 50 per cent of the anhydrous salt.—Pharm. J. 1914, v. 92, p. 135, and Year-Book of Pharmacy, 1914, p. 406.

Dubois, G.: The crystalline sodium glycerophosphate is the beta isomeride and contains 5½ molecules of water of crystallization.—Bull. Pharm. 1914, v. 28, p. 306. See also: J. Ind. & Eng. Chem. 1914, v. 6, p. 127.

François and Boismenu: The valuation of sodium glycerophosphate.—Ann. Falsif. 1914, v. 7, p. 430.

Liberati, T.: Of 15 lots examined only 1 was below the required 75 per cent of normal sodium glycerophosphate with 3 molecules of water.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 157.

SPIGELIA.

U. S. P. IX: The rhizome and roots may include not more than 10 per cent of stems and other foreign matter. Ash not exceeding 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 405, and Abstr. Prop. Changes, Part 2, 1914, p. 47.

Stockberger, W. W.: A large number of samples of spigelia examined recently proved to be spurious.—J. Am. Pharm. Assoc. 1914, v. 3, p. 33–34.

Rogers, C. H.: Sample of spigelia was found to consist of nearly 85 per cent of serpentaria.—Proc. Minnesota Pharm. Assoc. 1914, p. 141.

Lilly, J. K.: Adulteration and complete substitution with ruellia and various forms of phlox, together with unknown roots little resembling the genuine drug, has occurred regularly in samples of spigelia.—Proc. N. W. D. A. 1914, p. 264, and Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 35.

Roberts, J. G.: It is a difficult matter to obtain clean spigelia; an examination of several samples yielded 25.46 to 41.78 per cent of ash. One sample contained 20 per cent of ruellia and about 50 per cent of old and partially decayed spigelia rhizomes.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 156.

Baker, W. L.: Pink root was found to contain a large amount of earth and dirt.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

Häussler, F.: The juice of the fresh plant of spigelia has long been used by the natives of Haiti as a vermifuge.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 275.

SPIRITUS.

U. S. P. IX: Changes and new standards for spiritus.—J. Am. Pharm. Assoc. 1914, v. 3, p. 526–527, and Abstr. Prop. Changes, Part 3, 1914, p. 3–4.

Mittelbach, Wm.: There will be but little change in the official spirits except in the rubric of those to be of certain strength by assay.—Proc. Missouri Pharm. Assoc. 1914, p. 106.

Curry, Gordon L.: Of the 20 official spirits 16 can readily be prepared in the retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 58.

Lythgoe, Hermann C.: Seven hundred and forty-nine of the various forms of spirits were examined, of which 129 were adulterated.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 409.

SPIRITUS ÆTHERIS COMPOSITUS.

Brown, L. A.: Five samples of compound spirit of ether analyzed. Four passed and one adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 118.

SPIRITUS ÆTHERIS NITROSI.

Xrayser II: The title "sweet spirit of nitre," like the popular synonym for tincture of opium, has a somewhat curious history. It was in use long before the preparation was made official. The preparation was first made in England in 1846.—Chem. & Drug. 1914, v. 85, p. 755.

U. S. P. IX: Rubric to read not less than 3.5 nor more than 4 per cent of ethyl nitrite.—J. Am. Pharm. Assoc. 1914, v. 3, p. 526, and Abstr. Prop. Changes, Part 3, 1914, p. 3.

La Pierre, E. H.: The manufacture of spirit of nitrous ether.—Apothecary, 1914, v. 26, August, p. 22.

Bradley, T. J.: Assay of spirit of nitrous ether, with description of a modified nitrometer.—Proc. Massachusetts Pharm. Assoc. 1914, p. 91–93; also J. Am. Pharm. Assoc. 1914, v. 3, p. 1442, and Merck's Rep. 1914, v. 23, p. 296.

Dott, D. B.: The estimation of spirit of nitrous ether and a note on an old sample of spirit of nitrous ether.—Pharm. J. 1914, v. 92, p. 164. For discussion see p. 186. See also Chem. & Drug. 1914, v. 84, p. 240, and Merck's Rep. 1914, v. 23, p. 140.

Kemsey-Bourne, C. W.: The testing of spirit of nitrous ether. The systematic testing of this preparation by the nitrometer is the only safe procedure.—Pharm. J. 1914, v. 92, p. 125.

Hodgson, T. R.: Comparative study of the deterioration of spirit of nitrous ether.—Pharm. J. 1914, v. 92, p. 28.

Porter, C. S.: Spirit of nitre will keep pretty well at a temperature of 50°, but deteriorates at higher temperatures.—Proc. Kentucky Pharm. Assoc. 1914, p. 112.

Todd, A. R.: By experimentation it has been shown many times that "spirits of nitre" may be kept in perfect condition for a number of months if kept in accordance with the U. S. P.—Rep. D. & F. Com. Michigan, 1914, p. 191.

Brown, Lucius P.: Spirit of nitrous ether should be preserved strictly in accordance with the instructions included in the Pharmacopœia.—Bull. Tennessee F. & D. Dept. 1914, v. 1, p. 23. See also Drug Circ. 1914, v. 58, p. 487.

Anon.: Experiments show that ethyl nitrite decomposes very rapidly in the presence of an excess of water.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 417. See also Chem. & Drug. 1914, v. 85, p. 725.

Cowley, R. C.: The deterioration of spirit of nitrous ether. This preparation keeps wonderfully well, even at a relatively high temperature, when the stopper is only occasionally removed.—Pharm. J. 1914, v. 92, p. 461.

Table showing some of the analytical results reported for spirit of nitrous ether.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	2	2	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A	20	15	Proc. Kentucky Pharm. Assoc. 1914, p. 118.
Brown, L. P	4	2	Bull. Tennessee F. & D. Dept. 1914, v. 1, No. 1, p. 27.
Congdon, Leon A	22	22	Rep. Kansas Bd. Health, 1914, p. 100.
Frary, Guy G	85	63	Rep. South Dakota F. & D. Com. 1914, p. 228, 267, 338.
Jackson, Cook, and Strickland	1	1	Rep. Rhode Island F. & D. Com. 1914, p. 16.
Lythgoe, H. C	134	46	Rep. Massachusetts Bd. Health, 1913, 1914, p. 410.
Newcomb, G. D	1	1	Proc. Iowa Pharm. Assoc. 1914, p. 28.
Sayre, L. E	7	5	Bull. Kansas Bd. Health, 1914, v. 10, p. 26.
Stallings, R. E	3	2	Bull. Georgia Dept. Agric. 1914, v. 1, p. 19.
Todd, A. R	24	11	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd, A. R	16	8	Bull. Michigan D. & F. Com. 1914, January-February, p. 17, March-April, p. 19, November-December, p. 22.
Wiedemann, H. E	21	20	Rep. Missouri F. & D. Com. 1914, p. 39.
Woods, Chas. D	60	47	Off. Insp. Maine Agric. Exper. Sta. 1913, No. 48, p. 26–28, 1914, No. 61, p. 97–100.

Anon.: Sweet spirit of nitre is one of the oldest of household remedies for colds and fevers.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 416–417.

Editorial: As a remedy for acute and ephemeral febrile attacks in little children, spirit of nitrous ether is frequently useful.—Eclectic M. J. 1914, v. 74, p. 103.

SPIRITUS AMMONIÆ.

Weinstein, Joseph: Of 15 samples of spirit of ammonia collected on prescriptions, only 9 proved to be the alcoholic solution of ammonia.—Proc. New York Pharm. Assoc. 1914, p. 115.

SPIRITUS AMMONIÆ AROMATICUS.

Egan, T. H.: In making the aromatic spirit of ammonia, the alkaline solution should be allowed to stand for 12 hours and the alcoholic solution of the oils for 48 hours before mixing.—Am. Druggist, 1914, v. 62, p. 243.

Mills, Ralph: The U. S. P. order of mixing the solution should be reversed; the alcoholic solution of the oils gradually added to the alkaline solution. In this way a clear solution can be obtained at once.—Southern Pharm. J. 1914, v. 6, p. 536.

Brown, L. A.: Ten samples of aromatic spirit of ammonia analyzed; 1 passed and 9 adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 118.

Ziefle, Adolph: Of 94 samples of aromatic spirit of ammonia examined, 71 were not within 10 per cent of official strength.—Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 138–141.

SPIRITUS FRUMENTI.

Remington, J. P.: Among the questions still to be decided is the admission of whisky into the Pharmacopœia and the manner in which it is to be made official.—Proc. N. A. M. M. P. 1914, p. 32; also Am. Druggist, 1914, v. 62, p. 89, and Proc. Minnesota Pharm. Assoc. 1914, p. 87.

Frary, Guy G.: Some time could well be spent in examining the quality of liquor sold in the State.—Rep. South Dakota F. & D. Com. 1914, p. 10.

Barnard, H. E.: Of 15 samples of whisky examined, 2, or 13.3 per cent, were found to be illegal.—Rep. Indiana Bd. Health, 1914, p. 396.

Beythien and Hempel: Of 84 samples of whisky, 3 were found to be factitious products in that they contained so-called essences.—Pharm. Zentralh. 1914, v. 55, p. 438–439.

Williams, Edward Huntington: The liquor question in medicine.—Med. Rec. 1914, v. 85, p. 612–614.

SPIRITUS GLYCERYLIS NITRATIS.

U. S. P. IX: Rubric to read not less than 1, nor more than 1.1 per cent by weight of glyceryl trinitrate. Tests for identity and purity modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 526, and Abstr. Prop. Changes, Part 3, 1914, p. 3.

Heyl and Staley: Notes on the estimation of nitroglycerin. A comparison of the Kjeldahl method with the method proposed by Scoville shows the latter to be generally the more satisfactory.—Am. J. Pharm. 1914, v. 86, p. 195–198.

E'we, G. E.: Of two lots of 10 per cent nitroglycerin solution examined, one tested 9.25 and the other 10.3 per cent nitroglycerin.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 147.

Snider, H. F.: Report on the determination of nitroglycerin in tablets.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 201–204.

Kebler, L. F.: Outline of method for the determination of nitroglycerin in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1094–1095.

Rippetoe and Smith: Deterioration of nitroglycerin tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 96–97.

Kebler, L. F.: Tablets of nitroglycerin were found to contain 75 per cent of the amount claimed.—Proc. Kentucky Pharm. Assoc. 1914, p. 135.

Congdon, Leon A.: Four samples of nitroglycerin tablets were below standard.—Rep. Kansas Bd. Health, 1914, p. 100.

Todd, A. R.: Of seven samples of tablet triturates of nitroglycerin examined, four were found to be adulterated or misbranded.—Rep. Michigan D. & F. Com. 1914, p. 176.

Todd, A. R.: Of six samples of tablet triturates of nitroglycerin examined, four were found to be adulterated or illegal.—Bull. Michigan D. & F. Dept. 1914, January–February, p. 17, March–April, p. 19.

Ebright, George E.: The effects of nitroglycerin on those engaged in its manufacture.—J. Am. M. Assoc. 1914, v. 62, p. 201–202.

Macht, D. I.: Action of the nitrites on the isolated surviving pulmonary artery.—J. Am. M. Assoc. 1914, v. 62, p. 524. See also J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 23.

Braun, Israel: Nitroglycerin, alone or combined with morphine, or atropine is very useful in bronchial asthma for its vasodilator effect.—Merck's Arch. 1914, v. 16, p. 107.

SPIRITUS VINI GALLICI.

Alsberg, C. L.: Spurious brandy under misleading labels has for years been imported. Its importation has been stopped.—Am. Food J. 1914, v. 9, p. 21.

Emerson, R. L.: The labeling of cognac type of brandy.—S. R. A.-Chem. 1914, p. 113.

Alpers, Karl: Official regulations in connection with the trade in cognac and cognac blends.—Pharm. Ztg. 1914, v. 59, p. 796–797.

Häussler, E. P.: A contribution to our knowledge of the "ripening" of cognac.—Ztschr. öffentl. Chem. 1914, v. 20, p. 184–197.

Alsberg, C. L.: The bearing of Food Inspection Decision No. 152 on the distillation of brandy from pomace and other wine by-products.—S. R. A.-Chem. 1914, p. 113.

Ofner and Fortner: The determination of the higher alcohols in cognac by means of the reaction proposed by Komarowsky.—Arch. Chem. Mikros. 1914, v. 7, p. 195–201.

Rosenfeld, Rudolf A. P.: On the specificity of alcohol habituation.—Ztschr. Immun. u. exper. Therap. 1914, v. 21, p. 228–230.

SPIRITUS MYRCIÆ, N. F.

Williams, Ed. E.: Use magnesium carbonate as a filtering agent in the formula for bay rum of the N. F. This renders it a shade alkaline and brings out the color.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Watts, Francis: The bay leaf oil industry of the West Indies, with illustrations.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 425–427.

Beringer, George M.: A proposed N. F. monograph for Oleum Myrciæ, oil of myrcia; oil of bay. A volatile oil distilled from the leaves of *Pimenta acris* Wight. It should be kept in small well-stoppered amber-colored bottles, in a cool place, protected from light.—J. Am. Pharm. Assoc. 1914, v. 3, p. 876.

Jensen, H. R.: Twenty-two samples of bay oil of varying purity had a specific gravity of from 0.914 to 1.0025; refractive index of from 1.4952 to 1.5194; optical rotation of from −4.30° to +3.30°: and phenols from 25 to 70 per cent.—Evans' An. Notes, 1914, p. 10.

Mann, E. W.: A low percentage of phenols characterized one sample of oil of bay examined, the oil being either a partial distillate or reduced with the by-product resulting from the manufacture of the terpeneless oil.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 28.

Table showing some of the analytical results reported for bay rum.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E	3	0	Rep. Indiana Bd. Health, 1914, p. 443.
Congdon, L. D	3	2	Rep. Kansas Bd. Health, 1914, p. 100.
Stadtmueller, F. H	2	1	Rep Connecticut D. & F. Com. 1914. p. 15.
Street. J. P	8	1	Rep. Connecticut Agric. Exper. Sta. 1914, p. 248.
Strode, S. E	17	12	Rep. Ohio D. & F Div. 1914, p. 118

STAPHISAGRIA.

U. S. P. IX: The drug may include not more than 2 per cent of foreign vegetable matter. Description elaborated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 406, and Abstr. Prop. Changes, Part 2, 1914, p. 48.

Rippetoe, J. R.: One sample of staphisagria was found to contain 25.85 per cent of alcohol extract and 21.80 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

Jensen, H. R.: One sample of stavesacre seeds was found to leave 21.2 per cent of ash.—Evans' An. Notes, 1914, p. 66.

Williams, J. B.: The insecticidal value of fluid extract of larkspur seed.—Am. J. Pharm. 1914, v. 86, p. 414–416.

Editorial: The influence of staphisagria upon the mucous lining of the bladder and urethra is well defined and when the remedy is properly administered its action is reliable.—Ellingwood's Therap. 1914, v. 8, p. 69. See also Am. J. Clin. Med. 1914, v. 21, p. 244–245.

STILLINGIA.

U. S. P. IX: Description elaborated. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 406, and Abstr. Prop. Changes, Part 2, 1914, p. 48.

Rippetoe, J. R.: Four samples of stillingia were found to contain from 11.32 to 14.32 per cent of alcohol (49 per cent) extract and from 4.05 to 6.72 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

Maines, E. L.: Stillingia root was found to contain from 4.47 to 5.81 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

STRAMONIUM.

U. S. P. IX: The dried leaves of *Datura stramonium* with not more than 10 per cent of stems and other foreign matter. Ash not exceeding 20 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 407, and Abstr. Prop. Changes, Part 2, 1914, p. 49.

Henkel, Alice: An illustrated description of *Datura stramonium* L.—Phys. Drug News, 1914, v. 9, p. 158; also Spatula, 1914, v. 20, p. 472.

Mansfield, William: An illustrated description of jimsonweed, *Datura stramonium.*—Pract. Drug. 1914, v. 32, p. 12. See also Kremers, Edward: Bull. Wisconsin Univ. 1914, No. 738, p. 12.

Anon.: A general description of stramonium, the assay of stramonium, and the uses and therapeutic effect of the drug.—Southern Pharm. J. 1914, v. 6, p. 210.

Kremers, Edward: Experiments with something like 15 or 20 species and varieties of stramonium have demonstrated that practically all of them are attacked by beetles.—J. Am. Pharm. Assoc. 1914, v. 63, p. 1440.

Caesar & Loretz: The valuation of stramonium with table showing the requirements for this drug included in the several pharmacopœias.—Jahres-Ber. 1914, p. 86.

U. S. P. IX: Method of assay slightly modified.—J. Am. Pharm. Assoc. 1914, v. 3, p. 996, and Abstr. Prop. Changes, Part 4, 1914, p. 13.

Miller, F. A.: Observations on the breeding of stramonium plants to increase the alkaloid content.—Lilly Sci. Bull. 1914, Ser. 1, p. 130. See also Miller and Meader, p. 156–162.

Langenhan, H. A.: The alkaloidal content of stramonium leaves, with a table showing a compilation of the results obtained by various investigators and a comprehensive bibliography.—Bull. Wisconsin Univ. 1914, No. 738, p. 53–80.

Vanderkleed, C. E.: Reports 11 assays of stramonium leaf; from 0.304 to 0.520 per cent mydriatic alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

Roberts, J. G.: All but two of the eight samples examined conformed to the U. S. P. standard of not less than 0.25 per cent of mydriatic alkaloid.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 158.

Caesar & Loretz: One sample of stramonium was found to contain 0.342 per cent of mydriatic alkaloids and 19.67 per cent of ash.—Jahres-Ber. 1914, p. 38.

Maines, E. L.: Stramonium leaves were found to contain from 21.04 to 27.80 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

Mann, E. W.: Ash yield of two samples of powdered foreign stramonium leaves was found to be 19.70 and 21.50 per cent, respectively.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 25.

J. D. Riedel, A.-G.: Stramonium contained from 15.5 to 19.6 per cent of ash and from 20.7 to 25.2 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 32.

U. S. P. IX: One gm. of the extract or of the powdered extract to represent 4 gm. of the drug.—J. Am. Pharm. Assoc. 1914, v. 3, p. 537, and Abstr. Prop. Changes, Part 3, 1914, p. 14.

U. S. P. IX: The tincture to be assayed before being finished.—J. Am. Pharm. Assoc. 1914, v. 3, p. 548, and Abstr. Prop. Changes, Part 3, 1914, p. 25.

Braun, Israel: Among the group of remedies consisting of belladonna, hyoscyamus, stramonium, and lobelia, the first named is the most serviceable in the treatment of bronchial asthma.—Merck's Arch. 1914, v. 16, p. 106.

Fearn, John: Stramonium, also known by the common names of thorn apple, stinkweed, and Jamestown weed, is a powerful and beneficent remedy.—Eclectic M. J. 1914, v. 74, p. 294–295.

STRONTII BROMIDUM.

Hill, C. A.: Of 33 samples of strontium bromide examined during the years 1911 to 1913, inclusive, the lead content varied from 0 to 8 parts per million. The arsenic content varied from 0 to 0.6 parts per million.—Chem. & Drug. 1914, v. 85, p. 22.

Becker, Henry C.: Strontium bromide has no special virtue and no advantages over other bromides. There is no special advantage in a mixed bromide.—Merck's Arch. 1914, v. 16, p. 35.

STRONTII SALICYLAS.

Baker, W. L.: Two lots of strontium salicylate were rejected, as color was decidedly pink.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

STROPHANTHINUM.

Brauns and Closson: On crystalline Kombé strophanthin. The properties. molecular composition, and decomposition products of strophanthin.—Arch. Pharm. 1914, v. 252, p. 294–340. Also Pharm. Zentralh. 1914, v. 55, p. 1033–1035.

Haskell and Doeppers: The stability of ouabain in aqueous solution.—J. Am. Pharm. Assoc. 1914, v. 3, p. 646–648.

Ginzberg and Hohlberg: A contribution on the physiological standardization of heart tonics.—Compt. rend. Congr. Internat. Pharm. 1913, v. 1, p. 559–613. See also Joanin, A., p. 614–640.

Holste, Arnold: The valuation of heart tonics by means of the isolated frog's heart.—Ztschr. exper. Path. u. Therap. 1914, v. 15, p. 385–408.

Clark, A. J.: The mode of action of strophanthin upon cardiac tissue.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 215–234.

Weiss, Edmund: The physiological valuation of strophanthus and the several strophanthins.—Pharm. Post, 1914, v. 47, p. 339–342, 351–354, 360–365.

Johannessohn, Fritz: On the behavior of the strophanthins in the intestinal tract. I. The reputed cleavage of strophanthin by ferments. II. The detection of strophanthins in the stomach and in the intestine.—Arch. exper. Path. u. Pharmakol. 1914, v. 78, p. 82–98.

Gottschalk, Gertrud: The action of strophanthin on the oxygen consumption of the frog heart.—Arch. exper. Path. u. Pharm. 1914, v. 75, p. 33–42.

For additional comments on strophanthin see Zentralbl. Biochem. Biophys.; Biochem. Ztschr.; Zentralbl. exper. Med.; Index Med.; J. Am. M. Assoc.

STROPHANTHUS.

U. S. P. IX: The dried ripe seeds of *Strophanthus kombé*, or of *Strophanthus hispidus*, deprived of the long awn. Ash not exceeding 5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 407, and Abstr. Prop. Changes, Part 2, 1914, p. 49.

Baker, W. L.: Strophanthus seeds were found to be very damp and musty.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 211.

Matthes and Rath.: An examination of the oil of strophanthus.—Arch. Pharm. 1914, v. 252, p. 683–693. See also Haiduschka and Wallenrenter, p. 704–708.

Caesar & Loretz: The determination of strophanthin in strophanthus by the Fromme method.—Jahres-Ber. 1914, p. 109–111.

J. D. Riedel, A.-G.: Strophanthus contained from 3.8 to 4.8 per cent of ash and from 22.5 to 25.1 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 33.

Linke, H.: Strophanthus seed was found to contain from 3.8 to 6.8 per cent of total ash and from 0.4 to 1.8 per cent of ash insoluble in hydrochloric acid.—Apoth.-Ztg. 1914, v. 29, p. 673.

U. S. P. IX: The tincture is to be made from No. 40 powder. Percolated with purified petroleum benzin and subsequently extracted with alcohol.—J. Am. Pharm. Assoc. 1914, v. 3, p. 548, and Abstr. Prop. Changes, Part 3. 1914, p. 25.

Delaye, L.: A comparison of the requirements for the preparations of strophanthus included in the British, Chilean, Mexican, French, Swiss, and Roumanian Pharmacopœias and the International Conference Protocol.—Rev. Internat. Pharm. Brux. 1914, v. 2, p. 178.

Pearson, William A.: The physiological testing of heart tonics.—Hahnemann. Month. 1914, v. 49, p. 106–116.

Ginzberg and Hohlberg: A contribution on the physiological standardization of heart tonics.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 1, p. 559–613. See also Joanin, A., p. 614–640.

Holste, Arnold: The valuation of heart tonics. Digitalis, strophanthus, strophanthin, cymarin.—Ztschr. exper. Path. u. Therap. 1914, v. 15, p. 385–408.

Weis, Edmund: The physiological valuation of strophanthus and the several strophanthins.—Pharm. Post, 1914, v. 47, p. 339–342, 351–354, 360–365.

Vanderkleed and Pittenger: Variation in susceptibility of the guinea pig.—J. Am. Pharm. Assoc. 1914, v. 3, p. 815–819.

Gunn, J. W. C.: The influence of temperature on the action of strophanthin on the mammalian heart.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 39–44.

Caesar & Loretz: A review of the work by Lampert and Müller on the valuation of strophanthus.—Jahres-Ber. 1914, p. 27.

Janeway, Theodore C.: The comparative value of cardiac remedies, including a study of the action of strophanthin, digitalis, caffeine, and its allies.—Arch. Int. Med. 1914, v. 13, p. 361–383.

Johannessohn and Schaechtl: A clinical contribution to the strophanthus question. A comparison of the action of strophanthus and of digitalis.—Deutsch. med. Wchnschr. 1914, v. 40, p. 1412–1414.

See also under "Strophanthinum."

STRYCHNINA.

Einbeck, Hans: Progress in the chemistry of the strychnos alkaloids in 1913.—Fortschr. Chem. 1914, v. 9, p. 189.

Dott, D. B.: Estimation of strychnine in the presence of brucine.—Pharm. J. 1914, v. 92, p. 120; also Year-Book of Pharmacy, 1914, p. 331–332.

Simmonds, Charles: The estimation of strychnine in the presence of quinine.—Analyst. 1914, v. 39, p. 81–83.

Mameli, Efisio: Substances which tend to mask the color reaction of strychnine.—Boll. chim.-farm. 1914, v. 53, p. 366–369.

Guérin, G.: The employment of magnesium carbonate for the detection of traces of strychnine.—J. pharm. et chim. 1914, v. 9, p. 595–597. See also Denigès, G.: Bull. Soc. pharm. Bordeaux, 1914, v. 54, p. 289–293.

Gordin and Kaplan: Report of an attempt to facilitate the removal of strychnine from the precipitate obtained by adding Lloyd's reagent to a solution of a salt of the alkaloid in water.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1657, and Merck's Rep. 1914, v. 23, p. 296.

Marden and Elliott: For the extraction of strychnine from aqueous solution chloroform is better than mixtures of chloroform and ether, as suggested by many authors.—J. Ind. & Eng. Chem. 1914, v. 6, p. 933–934.

Wasicky, R.: The microchemical detection of strychnine and brucine in the seeds of strychnos nux vomica.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 35, 42, 53, 67.

Finnemore and Williamson: The incompatibility of strychnine and nux vomica with alkalies, iodides, and bromides.—Pharm. J. 1914, v. 92, p. 124–125. For discussion see p. 153. See also Year-Book of Pharmacy, 1914, p. 346–351, 351–355, and Merck's Rep. 1914, v. 23, p. 242–243.

Leuches and Schwaebel: A further contribution on strychnos alkaloids, with observations on acetyl-strychninolins and the finding of an isomeric strychninolin.—Ber. deutsch. chem. Gesellsch. 1914, v. 47, p. 1552–1560.

Chevalier, J.: The pharmacodynamic action of several synthetic derivatives of strychnine. The alkyl betaines of strychnic acid.—Nouv. remèdes, 1914, v. 31, p. 241–248.

McGuigan and Becht: The site of the action of strychnine.—J. Pharmacol. & Exper. Therap. 1914, v. 5, p. 469–478.

Githens and Meltzer: The convulsant action of strychnine and morphine in cardiectomized frogs after destruction of the anterior lymph hearts.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 96.

McGuigan, Hugh: A colloidal compound of strychnine and its pharmacology.—J. Am. M. Assoc. 1914, v. 63, p. 1933–1936.

Fantus, Bernard: The antidotal value of fuller's earth in strychnine poisoning.—J. Am. M. Assoc. 1915, v. 64, p. 1841–1842.

Paulucci, P.: Observations on the influence of oils and of vaseline on the toxicity of strychnine. A comprehensive bibliography on the detoxication of strychnine.—Arch. farmacol. sper. 1914, v. 18, p. 486–516.

Kuenzer, Rudolf: On the resorption and elimination of strychnine following parenteral injection of the strychnine in the guinea pig.—Arch. exper. Path. u. Pharmakol. 1914, v. 77, p. 241–250.

Krug: The qualitative physiological determination of strychnine.—Vrtljschr. ger. Med. 1914, v. 48, p. 248–259.

Newburgh, L. H.: In the treatment of cardiovascular disturbances, strychnine does not improve or augment the work of the heart in persons suffering from broken cardiac compensation.—J. Am. M. Assoc. 1914, v. 63, p. 311–313, and Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 84–91.

Poffenberger, A. T.: A comparison of the effects of caffeine and strychnine on mental and motor efficiency. The rather prevalent use of strychnine among brain workers as a mental stimulant finds no support in the conclusions from these researches.—Therap. Gaz. 1914, v. 38, p. 341–345.

Glenn, William S., jr.: The uses of strychnine salts are those of a spinal stimulant, with power of aiding the nerve force, by increasing the nutrition of the nervous system.—Eclectic M. J. 1914, v. 74, p. 353.

For additional comments on strychnine see Zentralbl. Biochem. Biophys.; Zentralbl. exper, Med.; Index Med.; J. Am. M. Assoc.

STRYCHNINÆ SULPHAS.

Kebler, L. F.: Outline of method for the determination of strychnine sulphate in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1098.

Brown, L. A.: Eight samples of strychnine sulphate tablets analyzed; six passed and two adulterated.—Proc. Kentucky Pharm. Assoc. 1914, p. 116.

Dejussieu, Michel: A note on the preparation of solutions of strychnine sulphate for injection.—Bull. Pharm. sud-est, 1914, v. 19, p. 241-242.

STRYCHNINE VALERATE.

Beringer, George M.: A proposed monograph for strychnine valerate, the valerate of the alkaloid strychnine. On incinerating 1 gm. the ash should not exceed 0.1 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1601.

STYRAX.

Mann, E. W.: An investigation into the quality of commercial supplies of storax.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 23–25.

Jensen, H. R.: Five samples of storax yielded 12.2 to 20 per cent cinnamic acid; 3.8 to 5 per cent alcohol insoluble material; and 0.4 to 1.1 per cent ash.—Evans' An. Notes, 1914, p. 66.

E'we, G. E.: Of the eight lots of storax examined, seven ranged from 70 to 88.9 per cent of nonvolatile alcohol-soluble matter.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 158.

SUCCUS.

Succus Citri.—Beringer, George M.: A proposed N. F. monograph for Succus Citri, lime juice. The expressed juice of the ripe fruit of *Citrus medica, var. acida* Linné. One hundred cc. should contain from 5 to 10 gm. of total acids, calculated as crystallized citric acid.—J. Am. Pharm. Assoc. 1914, v. 3, p. 878.

Lilly, J. K.: A recent shipment of lime juice was found to contain both sulphur dioxide and salicylic acid.—Proc. N. W. D. A. 1914, p. 262; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Succus Pomorum.—Beringer, George M.: A proposed N. F. monograph for Succus Pomorum, fresh apple juice. The freshly expressed juice of sound, ripe, sour apples, the fruit of cultivated varieties of *Pyrus malus* Linné.—J. Am. Pharm. Assoc. 1914, v. 3, p. 879.

SULPHONETHYLMETHANUM.

Wilbert, M. I.: Trional and methylsulphonalum are the titles used in continental pharmacopœias for sulphonethylmethanum.—J. Am. Pharm. Assoc. 1914, v. 3, p. 654.

Anon.: The Ph. Brit. V includes methylsulphonal, or diethy-sulphone-methyl-ethyl methane, better known as trional.—Chem. & Drug. 1914, v. 85, p. 487. See also Williams, Joseph H.: Pharm. J. 1914, v. 93, p. 293.

SULPHONMETHANUM.

Wilbert, M. I.: With the exception of the Ph. Brit., sulphonal is the recognized title for sulphonmethanum in foreign pharmacopœias.—J. Am. Pharm. Assoc. 1914, v. 3, p. 654.

Anon.: Outline of method for making sulphonal.—Southern Pharm. J. 1914, v. 7, p. 61. See also Williams, Joseph H.: Pharm. J. 1914, v. 93, p. 294.

E'we, G. E.: One lot of sulphonal melted at 124°, instead of at 125.5° required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 158.

Biachini, Gino: On the incompatibility existing between salol, sulphonal, and beta naphthol.—Atti accad. Lincei, 1914, v. 23, p. 608–615; also J. Soc. Chem. Ind. 1914, v. 33, p. 612.

SULPHUR.

Vail, Richard H.: New sources of sulphur in the south; an abstract.—Chem. Eng. 1914, v. 19, p. 18–22.

Hall. W. A.: Process for the extraction of sulphur from metallic sulphides (other than iron pyrites). English Patent 26,595, September 11, 1912.—J. Soc. Chem. Ind. 1914, v. 33, p. 135. See also p. 137, 485, and Feld, W., p. 692.

Hanson, C.: U. S. Patent 1,101,740. Sulphur and sulphates from sulphites.—J. Ind. & Eng. Chem. 1914, v. 6, p. 969.

Eumofopoulos, N.: The boiling point of sulphur on the thermodynamic scale.—Proc. Roy. Soc. Lond. Ser. A, 1914, v. 90, p. 189–203.

Seidell and Meserve: The determination of sulphur dioxide in air by aspiration methods, iodometric methods, and direct iodine titration methods.—Bull. Hug. Lab. No. 92, 1914, p. 9–17.

Peterson, W. H.: Forms of sulphur in plant materials and their variation with the soil supply.—J. Am. Chem. Soc. 1914, v. 36, p. 1290–1300.

Lewis and Randall: The free energy of the various forms of elementary sulphur.—J. Am. Chem. Soc. 1914, v. 36, p. 2468–2475.

Tartar, Herman V.: The reaction between sulphur and calcium hydroxide in aqueous solution.—J. Am. Chem. Soc. 1914, v. 36, p. 495–498.

Fabricius, Eugen: The toxicity of sulphur combinations in the human organism.—Pharm. Zentralbl. 1914, v. 55, p. 319–321; also J. Pharm. Alsass-Lothr. 1914, v. 41, p. 88–90.

Taegen, H.: Cause of the laxative action.—Nat. Druggist, 1914, v. 44, p. 242.

SULPHUR PRÆCIPITATUM.

Noyes, C. R.: The commercial grade of precipitated sulphur is called "Lac Sulphur." "Lac Sulphur," as it now appears on the market, is derived from the surface sulphur beds without purification. It is not precipitated, but shoveled, and does not contain more than 40 or 50 per cent of sulphur.—J. Am. Pharm. Assoc. 1914, v. 3, p. 853; also Proc. Minnesota Pharm. Assoc. 1914, p. 189.

Lythgoe, Hermann C.: Of 31 samples of precipitated sulphur examined, 4 were found to be adulterated.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 411.

Hill, C. A.: Of 38 samples of precipitated sulphur examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0 to 1.6 parts per million.—Chem. & Drug. 1914, v. 85, p. 23.

SULPHUR SUBLIMATUM.

U. S. P. IX: Sublimed sulphur replaces washed sulphur; otherwise no change.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1579, and Abstr. Prop. Changes, Part 6, 1914, p. 17.

Hill, C. A.: Of 65 samples of sublimed sulphur examined during the years 1910 to 1913, inclusive, the arsenic content varied from 0 to 1 part per million.—Chem. & Drug. 1914, v. 85, p. 23.

SUMBUL.

U. S. P. IX: The roots of *Ferula sumbul.* Description elaborated. —J. Am. Pharm. Assoc. 1914, v. 3, p. 408, and Abstr. Prop. Changes, Part 2, 1914, p. 50.

Maines, E. L.: Musk root was found to contain from 6.01 to 8.27 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 426.

Rippetoe, J. R.: One sample of sumbul was found to contain 20.23 per cent of alcohol (70 per cent) extract and 4.72 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

U. S. P. IX: For fluid extract of sumbul, to direct the use of alcohol 4 volumes and water 1 volume as menstruum.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes, Part 3, 1914, p. 20.

SUPPOSITORIA.

U. S. P. IX: A description for making suppositories by cold compression.—J. Am. Pharm. Assoc. 1914, v. 3, p. 552, and Abstr. Prop. Changes, Part 3, 1914, p. 29.

Mittelbach, Wm.: In the U. S. P. IX: The process for making suppositories is to be improved. Instead of working the mixture into a mass and proceeding as if pills are to be made, the mixture is pressed into the proper forms.—Proc. Missouri Pharm. Assoc. 1914, p. 107.

Angresius, Roman E. V.: An improvement in suppositories; description of a new method of making and dispensing suppositories, and the use of a removable gelatin coating to protect the mass from melting.—Southern Pharm. J. 1914, v. 6, p. 244–245.

Hron, Ralph P.: The melting of glycerin suppositories in the body is not due entirely to body heat but also to the moisture present.—Pharm. Era, 1914, v. 47, p. 232.

Wulff and Hillen: An illustrated description of a bougie mold.—Phrm. Post, 1914, v. 47, p. 343. See also Apoth.-Ztg. 1914, v. 29, p. 323.

SUPPOSITORIA GLYCERINI.

U. S. P. IX: To require that the dish in which the reaction occurs be thoroughly immersed in the boiling water and the contents protected as much as possible from the steam.—J. Am. Pharm. Assoc. 1914, v. 3, p. 552, and Abstr. Prop. Changes, Part 3, 1914, p. 29.

SYRUPI.

[NOTE.—Following Government Printing Office style, which is governed by Webster's International Dictionary, the spelling "sirup" is used in this publication.]

Anon.: To secure sirups of desirable quality, it is important that a quantity sufficient to last a reasonable length of time only me made.—N. A. R. D. Notes, 1914, v. 18, p. 370.

Sudro, W. F.: Pharmacists should pay close attention to all preparations in which sirup is a base; like all saccharin products, they are prone to deteriorate and when this change is noticed a fresh stock should be made up.—Rep. North Dakota F. Com. 1914, p. 31.

Curry, Gordon L.: All of the 29 official sirups should be made in the retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 59.

Windolph, J. Fred: Infection by bacteria, yeast fungus, or molds are responsible for changes in many solutions and sirups. Proc. Am. Assoc. Pharm. Chem. 1914, p. 222.

Vining, Dudley C.: An illustrated description of a simple apparatus for estimating fermentation in sirups.—Chem. & Drug. 1914, v. 84, p. 2.

Cochran and Perkins: The comparative values of some essential oils as preservatives of cane sugar solutions.—J. Ind. & Eng. Chem. 1914, v. 6, p. 304–306.

Anon.: The preservation of sirups has been a stumblingblock for many, principally because the sugar was of inferior quality or the sirup a little too thin or a little too heavy, or made in dirty vessels.—N. A. R. D. Notes, 1914, v. 17, p. 1028.

SYRUPUS.

U. S. P. IX: No change.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1575, and Abstr. Prop. Changes, Part 6, 1914, p. 13.

Anon.: In the making of simple sirup, the use of strictly pure cane sugar is a matter of great importance.—N. A. R. D. Notes, 1914, v. 18, p. 370.

Williams, Ed. E.: Confectioner's Crystal A sugar comes only in cane sugar and makes a sirup absolutely colorless and brilliantly clear.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Anon.: Sirup is best stored in bottles, so that no more than a small quantity, or sufficient to meet one's daily requirements, will be exposed to the action of the air for any great length of time.—Pacific Pharm. 1914, v. 7, p. 234.

Sudro, W. F.: Of 112 samples of simple sirup analyzed, many were found to be below strength.—Rep. North Dakota F. Com. 1914, p. 31.

SYRUPUS ACIDI HYDRIODICI.

Ziefle, Adolph: Of 53 samples of sirup of hydiodic acid examined, 24 were not within 10 per cent of standard. Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 148–149.

Brown, L. A.: Two samples of sirup of hydriodic acid analyzed. One passed and one misbranded.—Proc. Kentucky Pharm. Assoc. 1914, p. 118.

Thorburn, A. D.: One sample of sirup of hydriodic acid was 50 per cent below standard.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 212.

SYRUPUS BROMIDORUM, N. F.

Norwood, T. W.: In making compound sirup of bromides, the compound sirup of sarsaparilla should be replaced by a few ounces of sirup of tolu and a small amount of tincture of vanila.—Drug. Circ. 1914, v. 58, p. 390.

SYRUPUS CALCII LACTOPHOSPHATIS.

U. S. P. IX: For making sirup of calcium lactophosphate, the sugar has been reduced from 725 gm. to 650 gm. and 50 cc. of glycerin has been added.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1576, and Abstr. Prop. Changes, Part 6, 1914, p. 14.

SYRUPUS FERRI IODIDI.

Alpers, W. C.: Observations on the making and preserving of sirup of ferrous iodide.—Nat. Druggist, 1914, v. 44, p. 297–298; also J. Am. Pharm. Assoc. 1914, v. 3, p. 420–423, and Merck's Rep. 1914, v. 23, p. 116.

Beringer, George M.: A note on the value of preservatives in sirup of iron iodide.—Am. J. Pharm. 1914, v. 86, p. 358–359; also Proc. New Jersey Pharm. Assoc. 1914, p. 51.

Llewellyn, H. D.: The present strength of the sirup is to be preferred, but the working directions of the 1890 Pharmacopœia were much simpler. Proc. Missouri Pharm. Assoc. 1914, p. 142.

Norwood, T. W.: The retailer who makes sirup of ferrous iodide according to the U. S. P. may have it declared illegal unless he assays his preparation.—N. A. R. D. Notes, 1914, v. 18, p. 1048; also Drug Circ. 1914, v. 58, p. 390.

Mann, E. W.: A much improved formula for sirup of ferrous iodide is now official, glucose being used to inhibit the oxidation of the ferrous iodide.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 51–52.

Bohrisch, P.: Sirup of ferrous iodide may be produced in a practical way without the use of a catalizer. The preparation may be preserved by the addition of 0.5 per cent of citric acid.—Apoth.-Ztg. 1914, v. 29, p. 902; also Pharm. Zentralh. 1914, v. 55, p. 921.

Roth, Richard: Sirup of ferrous iodide will keep perfectly if exposed to direct sunlight, and therefore should be always kept in the window in small completely filled vials.—Southern Pharm. J. 1914, v. 6, p. 483.

Rupp, E.: The determination of halogen by silver nitrate, as suggested by the Brussels Conference, requires additional qualitative tests to show the absence of chlorine and bromine ions.—Südd. Apoth.-Ztg. 1914, v. 54, p. 322.

Fernau, Albert: For sirup of ferrous iodide, the determination of iodine by the Volhard method gives results that are generally satisfactory.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 264.

Porter, C. S.: Sirup of iodide of iron from solution of ferrous iodide.—Proc. Kentucky Pharm. Assoc. 1914, p. 61–62.

Table showing some of the analytical results reported for sirup of ferrous iodide.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	2	0	Rep. Indiana Bd. Health, 1914, p. 443.
Brown, L. A.	22	7	Proc. Kentucky Pharm. Assoc. 1914, p. 118.
Todd, A. R.	2	1	Rep. Michigan D & F. Com. 1914 p. 176.
Todd, A. R.	1	1	Bull. Michigan D. & F. Dept. 1914 January-February, p. 17.
Ziefle, Adolph	72	22	Rep. North Dakota Agric. Exper. Sta. 1912, 1914, p. 135–136.

SYRUPUS HYPOPHOSPHITUM.

U. S. P. IX: The sugar has been reduced from 650 gm. to 600 gm., 50 cc. of glycerin added, and the tincture of fresh lemon peel omitted. The alternative percolation method has been omitted.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1576, and Abstr. Prop. Changes, Part 6, 1914, p. 14.

Nixon, C. F.: The solution of hypophosphites should be allowed to stand 48 hours and filtered before dissolving the sugar.—Apothecary, 1914, v. 26, January, p. 20.

SYRUPUS HYPOPHOSPHITUM COMPOSITUS.

Egan, T. H.: Compound sirup of hypophosphites is a source of trouble. Fermentation is caused by insufficient amount of sugar. This may be overcome by replacing 4 fluid ounces of water with glycerin.—Am. Druggist, 1914, v. 62, p. 243.

Williams, Ed. E.: The compound sirup of hypophosphites is not a stable preparation and experiments should be undertaken to furnish a more satisfactory article.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

SIRUP OF IODOTANNIN.

Marchand, Ch.: Formulas and methods for making sirup of iodotannin.—Farm. Españ. 1914, v. 46, p. 279–281.

Henry, C.: The determination of iodine in preparations of iodotannin extracts for sirup.—Répert. pharm. 1914, v. 26, p. 149–151.

SYRUPUS PAPAVERIS, N. F.

Amos, W. S.: Sirup of poppy could well be replaced with a sirup of morphine hydrochloride.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

SYRUPUS PHOSPHATUM COMPOSITUS, N. F.

Williams, Ed. E.: Sirup of phosphates compound should be kept on ice, and is a permanent preparation when so stored.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Hensel, Samuel T.: In making compound sirup of the phosphates N. F. it is necessary to eliminate all the liberated carbon dioxide to secure a preparation that will be at all satisfactory.—J. Am. Pharm. Assoc. 1914, v. 3, p. 232–233.

SYRUPUS PINI STROBI COMPOSITUS, N. F.

Llewellyn, H. D.: The general use of sirup of white-pine compound makes this preparation sufficiently important to be admitted to the Pharmacopœia under its present formula and working directions.—Proc. Missouri Pharm. Assoc. 1914, p. 143.

Snider, H. F.: Sirup of white-pine compound is a very much abused formula and very misleading to physicians.—Proc. Am. Assoc. Pharm. Chem. 1914, p. 194.

Hensel, S. T.: Observations on the cause of instability of the compound sirup of phosphates, with a suggestion for a modified formula.—Merck's Rep. 1914, v. 23, p. 38–39.

Editorial: Compound sirup of white pine is not adapted to popular use on account principally of its morphine content.—Drug. Circ. 1914, v. 58, p. 203.

Herb, Joseph: Compound sirup of white pine, particularly the combination with tar, is a satisfactory cough remedy.—Drug. Circ. 1914. v. 58, p. 203–204.

TALCUM.

Noyes, C. R.: Talcum is called French chalk. It is, of course, not chalk, and has not the slightest chemical relation to chalk. Nevertheless as sold it may contain calcium and magnesium carbonates.—J. Am. Pharm. Assoc. 1914, v. 3, p. 854; also Proc. Minnesota Pharm. Assoc. 1914, p. 191.

News Note: The total marketed production of talc for 1913 was 149,371 short tons.—Oil, Paint & Drug Rep. 1914, v. 85, August 10, p. 19.

Richter, Ernst: Two samples of talcum on heating became dark gray.—Apoth.-Ztg. 1914, v. 29, p. 211.

Caesar & Loretz: The determination of iron in talcum by treating it with salicylic acid.—Jahres-Ber. 1914, p. 112.

Thalberg, Friedrich: The use of talc as a lubricant.—Chem. Ztg. 1914, v. 38, p. 711–712.

Kebler, L. F.: Outline of method for the determination of talcum in compressed tablets.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1081.

TARAXACUM.

U. S. P. IX: Description elaborated. Ash not exceeding 10 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 408, and Abstr. Prop. Changes, Part 2, 1914, p. 50.

Roberts, J. G.: One shipment of dandelion root contained about 25 per cent of chicory.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 137.

News Note: Three bags of drugs, marketed as dandelion root, were found to consist in substantial part of chicory.—Pharm. Era, 1914, v. 47, p. 580.

Rippetoe, J. R.: Two samples of taraxacum were found to contain 32.14 and 37.96 per cent of alcohol (49 per cent) extract and 11.40 and 8.37 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

Maines, E. L.: Dandelion root was found to contain from 3.03 to 15.30 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

J. D. Riedel, A.-G.: Taraxacum root and herb contained from 12 to 14.8 per cent of ash and from 41.9 to 45.2 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 33.

U. S. P. IX: First menstruum for fluid extract to consist of a mixture of glycerin 100 cc., alcohol 500 cc., and water 400 cc.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes, Part 3, 1914, p. 20.

TEREBENUM.

E'we, G. E.: Four lots of terebene examined were slightly below the specific gravity required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 158.

Jensen, H. R.: Seven out of twelve samples of terebene satisfied the official requirements as to density, but not as to optical inactivity.—Evans' An. Notes, 1914, p. 67.

Mann, E. W.: Three large batches of terebene showed a specific gravity of from 0.856 to 0.865; optical rotation, —0.35° to +0.15°.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 40.

TEREBINTHINA.

Record, Samuel J.: Prolonging the naval stores industry. An illustrated description of methods for tapping pine trees for turpentine.—Sci. Am. 1914, v. 110, p. 173, 186.

Enz, Karl: Turpentine and oil of turpentine, with the official Ph. Germ. V. tests and requirements.—Apoth.-Ztg. 1914, v. 29, p. 785–787.

Süntola, S. C.: The determination of ordinary turpentine in Venetian turpentine, according to the method proposed by L. C. Walbum.—Pharm. Zentralh. 1914, v. 55, p. 2–4.

van Itallie and Weidner: A study of the nature and constituents of *Terebinthina laricina.*—Apoth.-Ztg. 1914, v. 29, p. 235–236.

TEREBINTHINA CANADENSIS.

Mann, E. W.: Four samples of Canada balsam have been examined, the results being normal throughout. The acid value ranged from 74.5 to 85.7 and the saponification value from 87.4 to 96.6.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 9.

Schimmel & Co.: A sample of Canada balsam, received from Quebec, having an optical rotation of +1.5412 when distilled with steam yielded a colorless oil, with an aroma resembling that of the cones of *Abies pectinata.*—Semi-Ann. Rep. April, 1914, p. 40.

Beath and Sayre: Oregon balsam. A discussion on the origin of the product.—J. Am. Pharm. Assoc. 1914, v. 3, p. 28–30.

THEOBROMA.

Häussler, E. P.: A short contribution on the history of theobroma.—Pharm. Zentralh. 1914, v. 55, p. 46–47.

Cradwick, W.: The cultivation of cacao.—J. Jamaica Agric. Soc. 1914, v. 18, p. 116–118, 162–164. See also Beihefte zum Tropenpflanzer, 1914, v. 15, p. 135–307.

Book review of a volume on the Fermentation of Cacao, edited by H. H. Smith. London: John Bale, Sons, and Danielsson, Ltd.—Nature, 1914, v. 92, p. 628.

Driessen, J. H.: The shell of the cacao bean. The theobroma shell content of cacao and of chocolate.—Compt. rend. Congr. Internat. Pharm. 1913, 1914, v. 2, p. 1071–1074.

Häussler, E. P.: The quantitative determination of hulls in cacao and in chocolate.—Arch. Pharm. 1914, v. 252, p. 424–429.

E`we, G. E.: The 10 samples of powdered cocoa examined ranged between 15.6 and 20.5 per cent fat and were labeled "fat free."—Proc. Pennsylvania Pharm. Assoc. 1914, p. 135.

Mansfield, M.: Of 35 samples of cacao and chocolate examined 4 were found to be inferior products.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 68, p. 524.

Moudy, Ross B.: Reports 11 samples of chocolate; 4 not passed.—Bull. Wyoming D. F. & Oil Dept. 1914, v. 2, No. 4, p. 6.

For additional references on cacao see Exper. Sta. Rec.; Chem. Abstr.; Ztschr. unters. Nahr u. Genussm.

THEOBROMINE.

Chevalier, J.: Crystallized theobromine and the impurities contained in commercial theobromine.—Nouv. remèdes, 1914, v. 31, p. 265–269.

Wagenaar, M.: Microchemical reactions for caffeine, theobromine, theophylline, and their derivatives by sublimation.—Pharm. Weekblad, 1914, v. 51, p. 23–24.

THEOBROMINE SODIUM SALICYLATE.

Editorial: Diuretin appears in the Ph. Brit. V. as theobrominae et sodii salicylas.—Am. Druggist, 1914, v. 62, p. 404. See also Chem. & Drug. 1914, v. 85, p. 487.

Puckner and Leech: Theobromine sodium salicylate versus "diuretin''; the economical aspect, with a report of the details of analysis.—Rep. Chem. Lab. Am. M. Assoc. 1914, v. 7, p. 7–12; also J. Am. M. Assoc. 1914, v. 62, p. 1108–1109.

Linke, H.: Commercial preparations of theobromine sodium salicylate vary in water content. Three samples contained from 1.5 to 7.95 per cent of moisture.—Apoth.-Ztg. 1914, v. 29, p. 6794.

Jensen, H. R.: One sample of sodium theobromine salicylate yielded 43.2 per cent theobromine; sodium monoxide, 13.8 per cent.—Evans' An. Notes, 1914, p. 65.

Fitz, R.: The immediate effect of repeated doses of theobromine sodium salicylate and theocin on renal function in acute experimental nephritis.—Arch. Int. Med. 1914, v. 13, p. 945–956. See also v. 14, p. 827–843.

Taylor, Lester: Clinical studies in caffeine and a comparison with theobromine sodium salicylate.—Ann. Rep. Therap. Res. Com. 1914, v. 3, p. 118–130.

Jarisch, Adolf: On the mechanism of diuretin glycosuria.—Arch. ges. Physiol. 1914, v. 158, p. 502–508.

THYMOL.

Anon.: The present scarcity of the antiseptic thymol. The source of thymol and some of the substitutes that have been suggested.—Bull. Imp. Inst. 1914, v. 12, p. 599–605. See also Perf. & Ess. Oil Rec. 1914, v. 5, p. 372–373, and Chem. & Drug. 1914, v. 85, p. 452.

Redman, Weith, and Brock: A rapid volumetric method for determining *o*, *m*, and *p*-cresols, thymol, and phenol.—Chem. News, 1914, v. 110, p. 168–169, 176–179.

Whiting, A. D.: A 5 per cent solution of thymol in alcohol has a distinct antiseptic power, but it is not markedly germicidal.—J. Am. M. Assoc. 1914, v. 63, p. 475; also Tr. Am. M. Assoc. Sec. Pharm. & Therap. 1914, p. 143.

Seidell, Atherton: The analysis of thymol capsules. No indication was obtained of harmful impurities which might account for accidental cases of poisoning sometimes noted in the thymol treatment of hookworm.—Bull. Hyg. Lab. No. 96, p. 63–65.

TINCTURÆ.

U. S. P. IX: Abstract of proposed changes in formulas and requirements for the official tinctures.—J. Am. Pharm. Assoc. 1914, v. 3, p. 544–549, and Abstr. Prop. Changes, Part 3, 1914, p. 21–25.

Llewellyn, H. D.: The tinctures should retain their present strengths and working directions. The assayed tinctures and their processes to be left so that the average retail pharmacist can do the work in his own store.—Proc. Missouri Pharm. Assoc. 1914, p. 143.

Mittelbach, Wm.: Most of the official tinctures will remain as they are. The fineness of the powdered drugs has been reduced from 60 to 40 in many instances.—Proc. Missouri Pharm. Assoc. 1914, p. 107.

Editorial: In the Ph. Brit. V all tinctures of potent drugs are put on the 10 per cent basis.—Bull. Pharm. 1914, v. 28, p. 441.

Anon.: Practically all pharmacopœias prescribe a strength of 1: 5 for tinctures of ordinary medicines, and for the sake of international uniformity this relation should be preserved.—Pharm. Post, 1914, v. 47, p. 786.

Bohrisch, P.: A review of some of the recent comments on the Ph. Germ. V methods for making official tinctures.—Pharm. Zentralh. 1914, v. 55, p. 921–922; also Apoth.-Ztg. 1914, v. 29, p. 902.

Gray, Wm.: There should be some form of standardized concentrated preparation of the assayed drugs which could be diluted to make U. S. P. tinctures for the benefit of pharmacists who can not afford to make such tinctures, with the assay process for the same.—J. Am. Pharm. Assoc. 1914, v. 3, p. 901. See also Editorial: Am. Druggist, 1914, v. 62, p. 278.

Porterfield, W. P.: The practice of diluting strong preparations to a weaker dilution, as in the making of tinctures from fluid extracts, is very often the source of adulterated samples.—Proc. North Dakota Pharm. Assoc. 1914, p. 78; also Northwestern Druggist, 1914, v. 15, September, p. 38.

Curry, Gordon L.: All of the more frequently used tinctures should be made whenever possible from assayed drugs and with great care.—Proc. Kentucky Pharm. Assoc. 1914, p. 59.

Wilbert, M. I.: Official and other tinctures. The need for adapting the menstruum to the drug.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1660–1663.

Heinselmann: Rational methods for the making of tinctures and the desirability of providing for adequate control of this class of preparations by the pharmacist.—Pharm. Post. 1914, v. 47, p. 753–754. See also editorial comment, p. 754.

Richter, R.: A contribution on the testing of tinctures. The relation of extract content to the specific gravity.—Pharm. Zentralh. 1914, v. 23–33; also Apoth.-Ztg. 1914, v. 29, p. 211.

Caesar & Loretz: The determination of the extract content of tinctures.—Jahres-Ber. 1914, p. 68–69.

Anselmino, O.: A contribution on the testing and the control of tinctures, with a compilation of accumulated data on several of the more widely used preparations.—Arb. Pharm. Inst. Univ. Berl. 1914, p. 24–33. See also Freund, Hans: Apoth.-Ztg. 1914, v. 29, p. 406–407.

Lewis S. Judd: The mineral constituents of certain tinctures and drugs.—Pharm. J. 1914, v. 93, p. 126–128; also Year-Book of Pharmacy, 1914, p. 361–369.

Varnum, Walter H.: There are probably as many tinctures found above as below standard strength. The lack of uniformity is explained by the methods used to produce some of the U. S. P. preparations.—Western Druggist, 1914, v. 36, p. 277–278.

Rupp, E.: The pharmacist who prepares his own tinctures should not be required to test them.—Südd. Apoth.-Ztg. 1914, v. 54, p. 302.

Becker, I. A.: The alcoholic preparations of the Pharmacopœia—fluid extracts, tinctures, spirits, etc.—should have the alcohol content of the finished product stated definitely.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1025.

Mossler and Markus: A rapid, simple, and readily followed method for the determination of the alcohol content of tinctures.—Pharm. Post, 1914, v. 47, p. 291–294, 315–318; also Apoth.-Ztg. 1914, c. 29, p. 466–467.

Wratschko, Franz: Observations on the refractodensimetry of tinctures. An experimental study on the possible uses of the refractometer in the valuation of tinctures.—Ztschr. Allgem. österr. Apoth.-Ver. 1914, v. 52, p. 285, 297, 315, 332, 343. See also Mossler, Gustave: p. 355–356.

Roth, Richard: Fluid extracts, tinctures, and liquid preparations generally are best kept in amber-colored bottles away from the light.—Southern Pharm. J. 1914, v. 6, p. 483; also Bull. Pharm. 1914, v. 28, p. 480.

Lythgoe, Herman C.: Three hundred and seventy-six samples of tinctures were examined, 53 of which were adulterated.—Rep. Massachusetts Bd. Health, 1913, 1914, p. 409.

TINCTURÆ, N. F.

Amos, W. S.: The tinctures proposed for admission to the National Formulary except two, cactus grandiflorus and saw-palmetto and santal, should be included. The reports in regard to the efficacy of tincture of cactus grandiflorus are conflicting, and it is thought that elixir saw-palmetto and santal would be a more useful preparation than the tincture.—J. Am. Pharm. Assoc. 1914, v. 3, p. 323.

Tincture of cactus.—Havaland, H. G.: Manufacturers and dealers frequently label cactus as "night-blooming cereus."—Drug. Circ. 1914, v. 58, p. 349.

Ellingwood, Finley: Cactus grandiflorus, a neglected heart remedy.—Am. J. Clin. Med. 1914, v. 21, p. 693–697.

Tincture of caramel.—Beal and Zoller: The preparation of pure sucrose and dextrose caramels.—J. Am. Pharm. Assoc. 1914, v. 3, p. 495–497.

Stockinger, O.: The nine lots of caramel examined assayed 35, 40, 45, 69, 47, 16, 50, 45, and 35 per cent, respectively, of the standard proposed by Upsher-Smith. All were free from carbonates.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 134.

Scoville, W. L.: Freshly prepared caramel contains formaldehyde from decomposition of the sugar, but old samples contain only the oxidation product—formic acid. All samples contain traces of furfurol.—Bull. Pharm. 1914, v. 28, p. 484.

Turner, Ardeshire K.: Note on the detection of caramel in nonsaccharine spiritous liquors.—Chem. World, 1914, v. 3, p. 42.

Tinctura ferri citro-chloridi N. F.—E'we and Vanderkleed: For the assay of tincture of ferric citro-chloride N. F., the U. S. P. method for the assay of tincture of ferric chloride is applicable.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1682.

Tinctura ferri pomata N. F.—J. D. Riedel, A.-G.: The specific gravity of tincture of ferrated extract of apples was found to vary from 1.021 to 1.030, the dry extract from 7 to 9.3 per cent, and the iron content from 0.52 to 0.56 per cent.—Riedel's Berichte, 1914, p. 45.

Tinctura persionis N. F.—Williams, Ed. E.: In making tincture of persionis, mix the cudbear with an equal amount of sand before percolating, as otherwise it is almost impossible to percolate it.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

Norwood, T. W.: A change from tincture of cudbear to the powdered drug as a coloring agent, where possible, would greatly lessen the comment from physicians and others as to variation in shade in our colored preparations and alcoholic preparations.—Drug. Circ. 1914, v. 58, p. 390.

Lilly, J. K.: One sample of powdered cudbear contained approximately 20 per cent sodium chloride.—Proc. N. W. D. A. 1914, p. 262; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Maines, E. L.: Cudbear was found to contain 7.83 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

E'we, G. E.: Four samples of cudbear examined were rated in coloring power by calling the strongest sample 100. They tested as follows: 100, 100, 86, and 81.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 137.

Patch, E. L.: Cudbear varies from 60 to 100 per cent in coloring power.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1287.

TRAGACANTHA.

U. S. P. IX: Description elaborated. Ash not exceeding 3.5 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 408, and Abstr. Prop. Changes, Part 2, 1914, p. 50.

Gehe & Co.: The production of tragacanth is again below the average.—Handelsbericht, 1914, p. 120.

von Fellenberg, Th.: A contribution to our knowledge of tragacanth. A study of bassorin and bassorinic acid.—Mitt. Lebensm. Hyg. 1914, v. 5, p. 256–259.

Jensen, H. R.: Many specimens of apparently perfectly pure second-grade gum were examined, which possessed a mucilaginous value only about one-half that of the finest "Elect" samples.—Evans' An. Notes, 1914, p. 68.

Fromme, G.: The valuation of powdered tragacanth by means of cuoxam or ammoniated copper. The cuoxam method gives variable results.—Apoth.-Ztg. 1914, v. 29, p. 617–619. See also Caesar & Loretz: Jahres-Ber. 1914, p. 28–36.

Linke, H.: One sample of tragacanth was found to contain 2.4 per cent of ash. A second sample was adulterated, probably with acacia.—Apoth.-Ztg. 1914, v. 29, p. 673.

Mann, E. W.: The eight samples of tragacanth powder tested for ash were all well within the 4 per cent official maximum, the range observed being 1.84 to 2.37 per cent.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 25.

Caesar & Loretz: The determination of acacia in powdered tragacanth, with a table showing the limits for ash prescribed in the several pharmacopœias.—Jahres-Ber. 1914, p. 116.

E'we, G. E.: Powdered tragacanth varied more than 100 per cent in comparative consistency of mixtures with water. All lots examined answered all U. S. P. requirements and were free from Indian gum.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 159.

TRITICUM.

U. S. P. IX: Description elaborated. Qualitative test included. Ash not exceeding 3 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 409, and Abstr. Prop. Changes, Part 2, 1914, p. 51.

Anon.: Triticum in the Ph. Brit. V. is writ large as agropyrum.—Chem. & Drug. 1914, v. 85, p. 486.

Maines, E. L.: Dog grass was found to contain from 3.94 to 5.48 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

Rippetoe, J. R.: One sample of triticum was found to contain 39.69 per cent of water extract and 3.92 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

U. S. P. IX: For the fluid extract, the aqueous extract is to be evaporated to 800 cc. and 200 cc. of alcohol added as a preservative.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes, Part 3, 1914, p. 20.

TROCHISCI.

Allen, C. T.: Lozenge making at the dispensing counter. An illustrated description of the apparatus used.—Pharm. J. 1914, v. 92, p. 125.

Curry, Gordon L.: The official troches are largely replaced by compressed tablets. Their preparation is not justified unless upon prescription and with special formula.—Proc. Kentucky Pharm. Assoc. 1914, p. 59.

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Curry, Frank: The preparation and standardization of tuberculins.—Pharm. J. 1914, v. 92, p. 167-168.

Piorkowski: Tuberculosis remedies. A review of the methods and remedies that have been employed.—Apoth.-Ztg. 1914, v. 29, p. 19–21.

Whelan, J. H.: Strychnine-tuberculin treatment of hospital tuberculous cases.—Brit. M. J. 1914, v. 1, p. 1065–1066. See also p. 1213.

Solis-Cohen, Myer: The determination of the next dose in tuberculin therapy.—J. Am. M. Assoc. 1914, v. 63, p. 1386-1387.

Wilkinson, W. Carnac: Tuberculin, its use in the treatment of tuberculosis.—Practitioner, 1914, v. 93, p. 476–498.

Book review of a volume entitled "Plain Rules for the Use of Tuberculin." New York: William Wood & Company. London: R. Allan Bennet.—Boston M. & S. J. 1914, v. 171, p. 903.

Waugh, George E.: The use of tuberculin in surgical tuberculosis.—Am. Med. 1914, v. 20, p. 567-568.

Crowe, H. Warren: The controlled use of new tuberculin in the treatment of pulmonary tuberculosis.—Brit. M. J. 1914, v. 2, p. 490–491.

Detwiller, A. K.: The present status of tuberculin treatment.—Am. J. Clin. Med. 1914, v. 21, p. 125–126.

Editorial: The value of tuberculin. A review of several recently published papers.—Therap. Gaz. 1914, v. 38, p. 27–28.

Sahli, Hermann: Critical remarks on the lecture by Shaw on the present evidence for and against the use of tuberclin as a specific cure.—Brit. M. J. 1914, v. 1, p. 808–811.

Lyon, Thos. Glover: The consensus of opinion formed by unbiased observers is that no benefit arises from the injection of tuberculin and that, even when used with the greatest care, harmful results are liable to ensue.—Lancet, 1914, v. 187, p. 421.

Miller, Charles: A plea to check the activities of some of the tuberculin enthusiasts.—Lancet, 1914, v. 187, p. 266. See also Squire, J. Edward, p. 344.

Bronfrenbrenner and Rockman: A note on the purified antigen of Besredka in the serum diagnosis of tuberculosis.—Biochem. Bull. 1914, v. 3, p. 377–380. See also p. 381–385.

Bronfenbrenner, J.: On the clinical value of the serum skin test in tuberculosis.—Proc. Soc. Exp. Biol. 1914, v. 11, p. 90–92.

Leckie, A. J. Bruce: The cutaneous tuberculin reaction of von Pirquet.—Brit. M. J. 1914, v. 1, p. 1066–1068.

Krumbhaar and Musser: Diagnostic value of percutaneous tuberculin test (Moro).—Am. J. M. Sc. 1914, v. 147, p. 540–549.

Leckie, A. J. Bruce: The percutaneous tuberculin reaction. Observations on 400 cases.—Lancet, 1914, v. 186, p. 305–306.

Friedenwald, Harry: The dangers of the ophthalmic tuberculin test.—Am. Med. 1914, v. 20, p. 568–572.

Mills, Walter: The various tuberculins have some value as diagnostic aids, but less value as curative agents.—J. Am. Inst. Homœop. 1914, v. 7, p. 21.

For additional references on tuberculin see Index Med.; Zentralbl. Exper. Med.; J. Am. M. Assoc.

ULMUS.

U. S. P. IX: Description elaborated. Qualitative test included.—J. Am. Pharm. Assoc. 1914, v. 3, p. 410, and Abstr. Prop. Changes, Part 2, 1914, p. 52.

Anon.: An illustrated description of *Ulmus campestris* L.—Chem. & Drug. 1914, v. 84, p. 550.

E'we, G. E.: Two samples of elm bark gave a uniform suspension of fibers in the proportion of 1 gm. to 40 cc. of cold water, indicating a normal proportion of mucilage. The samples were free from starch.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 137.

Rippetoe, J. R.: Two samples of elm bark were found to contain 8.10 and 9.30 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 438.

UNGUENTA.

Gift, W. J.: The art of ointment making is the most ancient art in history. Ointments are the oldest preparations known.—Proc. Indiana Pharm. Assoc. 1914, p. 58.

Henrard, Louis: The official (Ph. Belg.) ointments. A discussion of the uses and limitation of the several excipients.—Ann. Pharm. Louvain, 1914, v. 20, p. 145–163.

Editorial: The importance of well-made ointments is not generally recognized by physicians. It is almost impossible to secure an ordinarily smooth ointment by the method employed by the retail druggist.—Phys. Drug. News, 1914, v. 9, p. 294.

Anon.: Hydrogenated or hardened oils are growing in importance industrially and chemically. The hardened oils resemble tallow in consistency and general properties, but keep better. They seem worthy of trial as ointment bases.—Bull. Pharm. 1914, v. 28, p. 306.

Blumenschein, F. J.: While most of the pharmaceuticals are being standardized and methods for improvement in manufacture and marketing are being proposed, the ointments and allied products are being neglected.—J. Am. Pharm. Assoc. 1914, v. 3, p. 895.

Raubenheimer, Otto: Do not dispense cerates and ointments when rancid, because they are very irritating.—J. Am. Pharm. Assoc. 1914, v. 3, p. 974.

Nitardy, F. W.: Ointments are preferably dispensed in collapsible tubes.—Am. Druggist, 1914, v. 62, p. 340. See also Grosh, Daniel M., Bull. Pharm. 1914, v. 28, p. 426.

Roth, Richard: Ointments should be taken from the stock container in such a way that little or no trimming of the remainder is necessary. This method allows of the least exposure to air and prevents deterioration.—Southern Pharm. J. 1914, v. 6, p. 483.

Curry, Gordon L.: All of the 24 official ointments, except mercurial ointment, are readily prepared in the retail drug store.—Proc. Kentucky Pharm. Assoc. 1914, p. 59.

Galloway, James: Ointments, their therapeutic value and their abuse.—Practitioner, 1914, v. 93, p. 736–744.

UNGUENTUM.

U. S. P. IX: Five per cent or more of the benzoinated lard may be replaced by white wax in southern latitudes and during the heated season in other localities.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1578, and Abstr. Prop. Changes, Part 6, 1914, p. 16.

Sayre, Edward A.: The present U. S. P. formula for ointment is a product that is too firm or stiff for even the hottest kind of weather. A more satisfactory product is made by using wax 140 and benzoinated lard 860.—Proc. New Jersey Pharm. Assoc. 1914, p. 80.

UNGUENTUM ACIDI BORICI.

U. S. P. IX: The paraffin is reduced to 50 gm. and the white petrolatum correspondingly increased.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1578, and Abstr. Prop. Changes, Part 6, 1914, p. 16.

Anon.: The latest revision of the Ph. Japon. discards the paraffin basis of boric-acid ointment for a simple ointment and glycerin.—Chem. & Drug. 1914, v. 84, p. 218.

Faber, Theodore: The determination of boric acid in ointments.—Pharm. Ztg. 1914, v. 59, p. 163–164. See also Enz, Karl, p. 313.

UNGUENTUM AQUÆ ROSÆ.

U. S. P. IX: The clause is omitted directing the omission of sodium borate when the ointment is used with metallic salts.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1578, and Abstr. Prop. Changes, Part 6, 1914, p. 16.

White, Jennie M.: Ointment of rose water, with a comparison of the formulas included in the U. S. P., Ph. Brit., and Ph. Germ.—Pacific Pharm. 1914, v. 8, p. 5.

UNGUENTUM DIACHYLON.

U. S. P. IX: White petrolatum replaces olive oil in the ointment.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1578, and Abstr. Prop. Changes, Part 6, 1914, p. 16.

UNGUENTUM HYDRARGYRI.

Rupp, E.: The assay of mercurial ointment.—Apoth.-Ztg. 1914, v. 29, p. 724; also Südd. Apoth.-Ztg. 1914, v. 54, p. 323.

Beckers, Wilhelm: The determination of mercury in mercurial ointment.—Pharm. Ztg. 1914, v. 59, p. 422. See also Jaenicke, p. 450.

Lythgoe, Hermann C.: Of six samples of mercury ointment examined two were found to be adulterated and four genuine.—Rep. Massachusetts Bd. Health, 1913–14, p. 411.

E'we and Vanderkleed: Physical instability of mercurial ointments. It would be well to include in the U. S. P. directions to mix well before dispensing.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1683.

UNGUENTUM HYDRARGYRI DILUTUM.

U. S. P. IX: The mercury has been reduced from 33.5 per cent to 30 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1579, and Abstr. Prop. Changes, Part 6, 1914, p. 16.

UNGUENTUM HYDRARGYRI AMMONIATI.

Arends, Georg: Ointment of ammoniated mercury should be prepared only from the freshly precipitated salt.—Apoth.-Ztg. 1914, v. 29, p. 988.

UNGUENTUM HYDRARGYRI NITRATIS.

U. S. P. IX: Process modified. Quantity to be prepared has been reduced to 100 gm.—J. Am. M. Assoc. 1914, v. 3, p. 1578–1579, and Abstr. Prop. Changes, Part 6, 1914, p. 16–17.

Gift, W. J.: Ointment of mercury nitrate was introduced into the Edinburgh Pharmacopœia in 1772.—Proc. Indiana Pharm. Assoc. 1914, p. 58. See also Xrayser II. Chem. & Drug. 1914, v. 84, p. 563.

UNGUENTUM HYDRARGYRI OXIDI FLAVUM.

Arends, Georg: Ointment of yellow oxide of mercury should be prepared from the freshly precipitated oxide.—Apoth.-Ztg. 1914, v. 29, p. 988.

Rupp, E.: Outline of a simple method for the assay of mercuric oxide ointment.—Apoth.-Ztg. 1914, v. 29, p. 723; also Südd. Apoth.-Ztg. 1914, v. 54, p. 323.

UNGUENTUM RESORCINI COMPOSITUM, N. F.

Nixon, C. F.: Modified formula for compound resorcin ointment.—Apothecary, 1914, v. 26, January, p. 21.

UNGUENTUM ZINCI OXIDI.

Llewellyn, H. D.: A mixture of equal parts of hydrated wool fat and petrolatum produces a more sightly ointment than that made with benzoinated lard.—Proc. Missouri Pharm. Assoc. 1914, p. 143.

Table showing some of the analytical results reported for zinc ointment.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Brown, Lucius P.	1	1	Bull. Tennessee F. & D. Dept. 1914, v. 1, p. 27
Lythgoe. Hermann C.	1	0	Rep. Massachusetts Bd. Health, 1913, 1914, p. 411.
Todd. A. R.	12	4	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd A. R.	4	3	Bull. Michigan D. & F. Dept. 1914, January-February, p. 17. September-October, p. 16.

UVA URSI.

U. S. P. IX: The drug may include not more than 5 per cent of stems and other foreign matter. Description elaborated and a qualitative test included.—J. Am. Pharm. Assoc. 1914, v. 3, p. 410, and Abstr. Prop. Changes, Part 2, 1914, p. 52.

Linke, H.: The Ph. Austr. VIII maximum of 4 per cent of ash for uva ursi is well above the average for this drug. which has been found to vary from 2.1 to 3.8 per cent.—Apoth.-Ztg. 1914, v. 29, p. 540.

Rippetoe, J. R.: Two samples of uva ursi were found to contain 33.21 per cent of alcohol (30 per cent) extract, and 22.32 per cent of alcohol (20 per cent) extract, and 4.15 and 2.91 per cent of ash, respectively.—Am. J. Pharm. 1914, v. 86, p. 443.

Maines, E. L.: Uva ursi leaves were found to contain from 1.44 to 3.29 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

J. D. Riedel, A.-G.: Uva ursi contained from 2.1 to 5.3 per cent of ash and from 42.3 to 44.6 per cent of extract soluble in water.—Riedel's Berichte, 1914, p. 32.

U. S. P. IX: For the fluid extract, first menstruum to consist of glycerin 100 cc.: alcohol 300 cc., and water 500 cc.—J. Am. Pharm. Assoc. 1914, v. 3, p. 543, and Abstr. Prop. Changes. Part 3, 1914, p. 20.

Anon.: Uva ursi is now recommended as a substitute for buchu. This is a new suggestion.—Meyer Bros. Drug. 1914, v. 35, p. 327.

VACCINE.

U. S. P. IX: The pustules of vaccinia or cowpox removed, under aseptic conditions, from vaccinated animals of the bovine species. It should be kept in a dark place, at a temperature between 4.5 and 15°.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1103, and Abstr. Prop. Changes, Part 5, 1914, p. 4.

Schröder, H.: History of evolution and the present-day status of vaccine treatment.—Therap. Monatsh. 1914, v. 28, p. 81–95.

Stewart, J. Reverdy: Outline of method employed in the production of vaccine.—J. Am. Pharm. Assoc. 1914, v. 3, p. 861.

Green, A. B.: The resistance of the vaccine virus to filtration.—J. Hyg. 1914, v. 14, p. 182–185.

Greeley, Horace: The organism of smallpox, chicken pox, and vaccinia.—Med. Rec. 1914, v. 86, p. 204–205.

Voigt: Vaccine virus is preferably kept at from 5 to 15° below zero.—Südd. Apoth.-Ztg. 1914, v. 54, p. 54.

Francis, Edward: There have been examined in the Hygienic Laboratory over 1,500,000 doses of vaccine virus without a single evidence of tetanus bacillus or its spore.—Hyg. Lab. Bull. No. 95, p. 73. See also Editorial: J. Am. M. Assoc. 1914, v. 63, p. 1032–1033.

Gody, Edmund F.: Vaccination is a surgical procedure; hence it demands surgical asepsis.—Boston M. & S. J. 1914, v. 170, p. 369–373.

Farmer, Alfred G.: A protest against the still too frequent use of "shields" in covering vaccination wounds.—J. Am. M. Assoc. 1914, v. 63, p. 2062.

Armstrong, W. E. H.: A rapid method of vaccinating against smallpox.—Brit. M. J. 1914, v. 2, p. 920.

Göppert, F.: The alleged harmful action of vaccine virus, and the precautions to be observed in vaccination.—Therap. Monatsh. 1914, v. 28, p. 674–681.

Diefendorf, Burke: The technic of vaccination. An illustrated description of a scarifier.—New York M. J. 1914, v. 100, p. 1120–1121.

Shalet, Louis: A simple method of vaccination.—J. Am. M. Assoc. 1914, v. 62, p. 1829. See also Force, J. H., p. 2042.

Apolant, E.: A contribution to the question of vaccination. Of 116 vaccinated persons exposed to smallpox no case of illness developed, while of 4 unvaccinated persons, 2 became ill.—Therap. Monatsh. 1914, v. 28, p. 656–657.

VALERIANA.

U. S. P. IX: Description elaborated. Ash not exceeding 20 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 411, and Abstr. Prop. Changes, Part 2, 1914, p. 53.

Editorial: Valerian can be grown in clayey soil. It is quite extensively cultivated in England and in Germany.—Pacific Pharm. 1914, v. 7, p. 297.

Mann, E. W.: The limit of 10 per cent of ash for valerian rhizome introduced into the 1914 Ph. Brit. is a very stringent one. Eight commercial samples examined during the year have yielded from 9.5 to 40.5 per cent of ash.—Ann. Rep. Southall Bros. & Barclay, 1914, p. 26.

Maines, E. L.: Valerian root was found to contain from 18.61 to 24.14 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

Dück: Two samples of valerian were found to contain 18.5 and 15.65 per cent of ash, respectively.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 235.

Rippetoe, J. R.: Four samples of valerian were found to contain from 16.46 to 26.40 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

Caesar & Loretz: Seven samples of valerian root were found to contain from 19.43 to 28.37 per cent of ash. Three samples contained from 17.30 to 24.40 per cent of extract soluble in diluted 70 per cent alcohol.—Jahres-Ber. 1914, p. 39.

J. D. Riedel, A.-G.: Valerian contained from 6.8 to 10.3 per cent of ash, and from 26.7 to 30.9 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 33.

Richter, R.: In determining the extractive in tincture of valerian, it should be remembered that continued heating or drying of the residue at 105° induces decomposition to such an extent that the resulting extract is no longer completely soluble in the original menstruum.—Pharm. Zentralh. 1914, v. 55, p. 27–28.

Editorial: American valerian, while not a narcotic, is classed as a nervine, and acts upon the spinal centers.—Phys. Drug. News, 1914, v. 9, p. 363.

VANILLA.

U. S. P. IX: Assay for vanillin to be included. Description elaborated. Ash not exceeding 6 per cent.—J. Am. Pharm. Assoc. 1914, v. 3, p. 411, and Abstr. Prop. Changes, Part 2, 1914, p. 53.

Gehe & Co.: The home of vanilla is Mexico and Central America, where it is still found wild, although it is also cultivated to a considerable extent. Cultivation is restricted by the large number of insect enemies.—Handelsbericht, 1914, p. 79–82.

Fauchère, A.: The cultivation of vanilla in Madagascar.—J. d'Agric. trop. 1914, v. 14, p. 105–109; also Perf. & Ess. Oil Rec. 1914, v. 5, p. 152–154.

Mawbey, Wallace: Vanilla beans. The history of the origin of the drug and comparison of the Mexican and Bourbon processes of preparing it.—Am. Perf. 1914, v. 9, p. 241–242.

Gehe & Co.: Vanilla is gathered when the green fruit becomes yellowish and the drying and curing is the most important part of the planter's work.—Pharm. Zentralh. 1914, v. 55, p. 399.

Roure-Bertrand Fils: A review of the situation of the vanilla market, including Mexican, Bourbon, and Tahiti vanilla.—Sc. & Ind. Bull. April, 1914, p. 66–67.

Maines, E. L.: Vanilla beans were found to contain 0.40 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 427.

U. S. P. IX: Method of making the tincture modified. Strength of alcohol somewhat reduced.—J. Am. Pharm. Assoc. 1914, v. 3, p. 548, and Abstr. Prop. Changes, Part 3, 1914, p. 25. See also Mittelbach, Wm.: Proc. Missouri Pharm. Assoc. 1914, p. 107.

La Wall and Forman: The principal factors to be taken into account in judging of an extract.—J. Am. Pharm. Assoc. 1914, v. 3, p. 25–28.

Marden, J. W.: The determination of acetanilide, vanillin, and coumarin in vanilla extracts.—J. Ind. & Eng. Chem. 1914, v. 6, p. 318.

Bradford, H. C.: The manufacture and composition of extract of vanilla for flavoring.—Drug. Circ. 1914, v. 58, p. 6–9.

Miller, H. Liscomb: Vanilla extract from the bean, with several formulas.—Spatula, 1914, v. 21, p. 127–128.

Editorial: Considerable diversity of opinion still prevails as to what per cent of alcohol will yield the finest extract of vanilla. So far as can be determined at the present time, 40 per cent brings about the best results.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 423–424.

E'we and Vanderkleed: Tincture of vanilla was found to dissolve lead and also to form precipitates containing lead.—J. Am. Pharm. Assoc. 1914, v. 3, p. 1685.

Table showing some of the analytical results reported for tincture of vanilla.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Barnard, H. E.	24	6	Rep. Indiana Bd. Health, 1914, p. 396.
Hortvet, Julius	86	27	Rep. Minnesota D. & F. Com. 1914, p. 56.
Lythgoe, H. C.	58	6	Rep. Massachusetts Bd. Health, 1914, p. 411.
Strode, Sylvanus E.	18	5	Rep. Ohio D. & F. Div. 1914, p. 121.
Todd, A. R.	1	1	Rep. Michigan D. & F. Com. 1914, p. 176.
Todd A. R.	1	1	Bull. Michigan D. & F. Dept. 1914, November-December, p. 22.

Notices of Judgment Nos. 2888, 2891, 2907, 2920, 2921, 2960, 3007, 3016, 3064, 3088, 3128, 3129, 3138, 3139, and 3307 relate to adulteration and misbranding of vanilla extract.—S. R. A.-Chem. 1914.

Leggett, Wm.: Vanilla as a skin irritant.—Brit. M. J. 1914, v. 1, p. 1351.

Anon.: Vanilla essence may give rise to a troublesome dermatitis.—Drug. Topics, 1914, v. 29, p. 115. See also Editorial: Pharm. J. 1914, v. 92, p. 870.

VANILLINUM.

Lehmann, M.: The manufacture and chemical properties of vanillin. The detection of adulterants. The congealing point of pure vanillin is almost exactly 82°.—Chem.-Ztg. 1914, v. 38, p. 388–389, 402–403. See also Perf. & Ess. Oil Rec. 1914, v. 5, p. 150–151, and Comment: Chem. & Drug. 1914, v. 84, p. 856–857.

Anon.: The physical constants of vanillin obtained from oil of cloves and from guaiacol.—Südd. Apoth.-Ztg. 1914, v. 54, p. 331–332.

Umney, J. C.: Vanillin is the odorous constituent of the vanilla bean, although the value of vanilla beans is not in actual ratio to the percentage of vanillin.—Perf. & Ess. Oil Rec. 1914, v. 5, p. 15.

Häussler, E. P.: The reactions of vanillin.—Ztschr. anal. Chem. 1914, v. 53, p. 363–371, 691–695.

Jensen, H. R.: Four good samples of vanillin melted between 80° and 82.5°, the melting point always extending over 1° to 1.5°.—Evans' An. Notes, 1914, p. 69.

Cerdeiras, J.: The use of vanillin-hydrochloric-acid reaction for the recognition of volatile oils.—Pharm. Zentralh. 1914, v. 55, p. 339–341.

Sullivan, M. X.: The origin of vanillin in soils—vanillin in wheat and in the water in which wheat seedlings have grown.—J. Ind. & Eng. Chem. 1914, v. 6, p. 919–921.

Perkin, jr., and Robinson: Some derivatives of orthovanillin.—J. Chem. Soc. Lond. 1914, v. 105, p. 2375–2392.

VERATRUM.

U. S. P. IX: The dried rhizome and roots of *Veratrum viride*, known in commerce as American hellebore, with not more than 5 per cent of stems and other foreign matter. Description elaborated.—J. Am. Pharm Assoc. 1914, v. 3, p. 412, and Abstr. Prop. Changes, Part 2, 1914, p. 54.

Lloyd, John Uri: Characteristics and constituents of veratrum.—Eclectic M. J. 1914, v. 74, p. 226.

Mansfield, William: An illustrated description of green hellebore, *Veratrum viride*.—Pract. Drug. 1914, v. 32, p. 12.

J. D. Riedel, A.-G.: Veratrum contained from 8.1 to 10.3 per cent of ash, and from 22.7 to 34.5 per cent of extract soluble in diluted (70 per cent) alcohol.—Riedel's Berichte, 1914, p. 33.

Vanderkleed, C. E.: Reports six assays of veratrum, from 1.30 to 2.14 per cent alkaloids; all above standard.—Proc. Pennsylvania Pharm. Assoc. 1914, p. 160.

U. S. P. IX: Tincture of veratrum changed to tincture of veratrum viride.—J. Am. Pharm. Assoc. 1914, v. 3, p. 548, and Abstr. Prop. Changes, Part 3, 1914, p. 25.

Rotheo and Rouyer: Report of a fatal case of poisoning by an infusion of fresh veratrum album root, which had been gathered under the mistaken impression that it was gentian.—Drug. Circ. 1914, v. 58, p. 80.

Boise, Eugene: The heart in shock and the action of veratrum viride on the heart.—New York M. J. 1914, v. 99, p. 983–987.

Macht, D. I.: The action of drugs on the isolated pulmonary artery. Veratrine has a tendency to cause a primary stimulation to contraction, but on the whole had no appreciable effect.—J. Pharmacol. & Exper. Therap. 1914, v. 6, p. 24.

French, J. M.: Veratrine is the remedy of choice in the treatment of fevers, when the case is sthenic in its nature, and the pulse full and bounding.—Am. J. Clin. Med. 1914, v. 21, p. 213.

Editorial: Veratrum is one of the most important medicines in the eclectic medicine case.—Eclectic M. J. 1914, v. 74, p. 153.

Roberts, Frederick: There is a danger from the administration of veratrum in pneumonia and cases should be carefully watched.—Ellingwood's Therap. 1914, v. 8, p. 135. See also Price, P. F.: p. 214–215.

VIBURNUM OPULUS.

U. S. P. IX: The dried bark of *Viburnum opulus*, with not more than 5 per cent of wood and other foreign matter. Description of powder to distinguish it from the powder of the bark of *Acer spicatum.*—J. Am. Pharm. Assoc. 1914, v. 3, p. 413, and Abstr. Prop. Changes, Part 2, 1914, p. 55.

Puckner, W. A.: Botanists and pharmaceutical chemists declare that viburnum opulus has not been on the American market for several years, if ever, and that the drug used as described in the U. S. P. is really the bark of another plant.—Rep. Council Pharm. Chem. 1914, p. 96.

Lilly, J. K.: The drug markets still offer the maple bark as genuine viburnum opulus. Proc. N. W. D. A. 1914, p. 263; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Beringer, George M., jr.: Of six samples of viburnum opulus examined , five were false viburnum opulus.—Proc. New Jersey Pharm. Assoc. 1914, p. 111.

Editorial: The National Formulary committee is to include a description for genuine viburnum opulus.—Drug. Circ. 1914, v. 57, p. 652.

Rippetoe, J. R.: Three samples of viburnum opulus were found to contain from 20.40 to 22.30 per cent of alcohol (65 per cent) extract, and from 3.10 to 3.89 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

Maines, E. L.: Cramp bark was found to contain from 1.45 to 3.50 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 425.

VIBURNUM PRUNIFOLIUM.

U. S. P. IX: The bark may include not more than 5 per cent of wood and other foreign matter. Description elaborated.—J. Am. Pharm. Assoc. 1914, v. 3, p. 413, and Abstr. Prop. Changes, Part 2, 1914, p. 55.

Lilly, J. K.: There has been a tendency toward an increase in the percentage of stem bark in black haw.—Proc. N. W. D. A. 1914, p. 262; also Oil, Paint & Drug Rep. 1914, v. 86, September 30, p. 34.

Rippetoe, J. R.: Four samples of viburnum prunifolium were found to contain from 16.88 to 23.15 per cent of alcohol (65 per cent) extract, and from 4.40 to 9.01 per cent of ash.—Am. J. Pharm. 1914, v. 86, p. 443.

Maines, E. L.: Black haw, bark of root, granular, was found to contain from 11.54 to 15.41 per cent of ash.—J. Am. Pharm. Assoc. 1914, v. 3, p. 424.

Lieb, C. C.: Fluid extract of viburnum stimulates the isolated uterus. Its action in dysmenorrhea is, therefore, not due to an effect on the uterus but to a depression of the central nervous system.—(Am. J. Obstet. & Dis. Wom. and Child. 1914, v. 69, No. 433) J. Am. M. Assoc. 1914, v. 62, p. 486.

Editorial: Viburnum prunifolium is less known than it should be. It is an agent which is efficacious without being toxic.—New York M. J. 1914, v. 100, p. 283–284.

Editorial: Viburnum prunifolium, or black haw, has been known and used by the eclectics for 50 or more years.—Nat. Eclect. M. Assoc. Quart, 1914–15, v. 6, p. 167. See also Eclectic M. J. 1914, v. 74, p. 541.

VINA.

Wagner, T. B.: The effect of legislation on the wine industry. Several processes employed in the production of wines.—J. Ind. & Eng. Chem. 1914, v. 6, p. 72.

Scoville, W. L.: Wine may be artificially aged in a few minutes by means of a combination of electric current and bubbling oxygen through it, but the flavor is reduced and its delicacy is spoiled as compared with the same wine aged in bottles by storage.—Bull. Pharm. 1914, v. 28, p. 526.

Wagner, T. B.: In the production of sweet wines it is necessary to "fortify" the wine with brandy.—Oil, Paint & Drug Rep. 1914, v. 85, February 2, p. 35.

Houston, D. F.: A revision of the official definition of wine and the permissible correction of natural defects by additions to musts or wines.—S. R. A.-Chem. 1914, p. 415.

Anon.: The official wine statistics and reports on the preparation of wine.—Arb. k. Gsndhtsamte, 1914, v. 49.

von der Heide and Baragiola: The difference between acid content and acid degree of wine, demonstrated by two examples.—Ztschr. Anal. Chem. 1914, v. 53, p. 249–260.

Njegovan, Vladimir: A new method for the determination of extract in wine.—Ztschr. Anal. Chem. 1914, v. 53, p. 160–165.

Fleissig: An illustrated description of an apparatus for determining the alcohol content of wine; a minometer.—Schweiz. Apoth.-Ztg. 1914, v. 52, p. 265.

Baragiola and Godet: An exposition of the results of an examination of wine in the sense of the newer chemico-physical theories.—Ztschr. anal. Chem. 1914, v. 53, p. 100–114.

Kling and Lassier: The determination of the total tartaric acid in wines.—Ann. Falsif. 1914, v. 7, p. 410–416.

Schafer and Arbenz: The determination of pentoses and methyl pentoses in wine.—Mitt. Legensm. Hyg. 1914, v. 5, p. 161–172.

Utz: A review of recent literature relating to the chemical examination of wine and other alcohol-containing beverages.—Pharm. Praxis, 1914, v. 12, p. 429–432.

Notices of Judgment Nos. 2811, 2812, 2902, 2971, 2977, 3101, 3140, 3158, 3161, 3162, 3163, 3164, 3165, 3193, and 3271 relate to the adulteration and misbranding of wines.—S. R. A.-Chem. 1914.

For additional references on wines see Ztschr. unters. Nahr. u. Genussm.; Chem. Abstr.; and Chem. Zentralbl.

VINA MEDICATA.

Anon.: At the beginning of the nineteenth century wine was one of the four principle menstrua, and in countries like France medicinal wines were the favorite form of tonics for convalescents.—Pharm. Era, 1914, v. 47, p. 318–319.

Remington, J. P.: Wine as a menstruum is no longer useful. We can get 25 per cent better results out of a 25 per cent alcohol than we can get out of wine. The only valuable thing we get out of wine is the alcohol in it.—Proc. West Virginia Pharm. Assoc. 1914, p. 88.

Llewellyn, H. D.: The present wines of the Pharmacopœia might retain their present formulas and working directions, being a class of preparations seldom used.—Proc. Missouri Pharm. Assoc. 1914, p. 143.

Curry, Gordon L.: The official medicated wines are all readily prepared without much time or labor. Most of them, however, should be allowed to stand several days before filtering.—Proc. Kentucky Pharm. Assoc. 1914, p. 59.

Editorial: Medicated wines: an interpretation of British law regarding the sale of alcohol containing wines.—Chem. & Drug. 1914, v. 85, p. 91–92. See also Pharm. J. 1914, v. 92, p. 161.

Wine of beef and iron.—Hague, George W.: The N. F. formula for beef, wine, and iron directs that alcohol be used and afterwards recovered by distillation. This gives the retail pharmacist a formula which is not practicable. The same can be said about wine of beef. Therefore, new formulas are needed for both of these preparations.—Merck's Rep. 1914, v. 23, p. 33.

Barnard, H. E.: Of seven samples of beef, iron, and wine examined, three, or 42.8 per cent, were found to be adulterated.—Rep. Indiana Bd. Health, 1914, p. 443.

Wine of pepsin.—Williams, Ed. E.: Many complain that the wine of pepsin is very unstable and hard to make a uniform product. A more satisfactory product is obtained by using sufficient brandy to furnish the alcoholic strength, detannate the brandy with milk before using it, and then add water enough to make the desired amount.—Proc. Wisconsin Pharm. Assoc. 1914, p. 23.

XANTHOXYLUM.

U. S. P. IX: The dried bark of *Xanthoxylum americanum*, known in commerce as Northern Prickly Ash Bark, and of *Xanthoxylum clava-herculis*, known in commerce as Southern Prickly Ash Bark, described separately.—J. Am. Pharm. Assoc. 1914, v. 3, p. 414, and Abstr. Prop. Changes, Part 2, 1914, p. 56.

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Reporters.	Number of samples—		References.
	Examined.	Rejected.	
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Congdon, L. A	18	17	Rep. Kansas Bd. Health, 1914, p. 100.
Hortvet, Julius	14	6	Rep. Minnesota D. & F. Com. 1914, p. 68.
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